

DLT: fabric Name: data-offer

Description: This testcase is to determine the large numbers of consumer query the dataOffer from application to check the scalability on hyperledger. Successive rounds create and retrieve dataOffer of larger byteSize.

Benchmark Rounds: 9

**Details** 

## Benchmark results

#### Summary

data-offer-evaluate-100
data-offer-evaluate-2000
data-offer-evaluate-2000
data-offer-evaluate-4000
data-offer-evaluate-8000
data-offer-evaluate-16000
data-offer-evaluate-32000
data-offer-evaluate-64000
data-offer-evaluate-8000-fixed-tps

## 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)
data-offer-evaluate-100	310	0	4.9	8.78	0.21	6.76	4.8
data-offer-evaluate-1000	343	0	5.3	9.29	0.34	6.69	5.2
data-offer-evaluate-2000	360	0	6.1	9.27	1.10	7.42	5.9
data-offer-evaluate-4000	400	0	6.0	9.13	0.20	6.18	5.9
data-offer-evaluate-8000	372	0	5.8	9.21	0.20	6.71	5.8
data-offer-evaluate- 16000	367	0	5.6	9.23	0.21	6.01	5.5
data-offer-evaluate- 32000	360	0	5.8	9.17	0.22	6.97	5.8
data-offer-evaluate- 64000	366	0	6.0	9.34	0.19	6.77	6.0
data-offer-evaluate- 8000-fixed-tps	610	0	10.2	34.87	1.57	22.01	7.4

## Benchmark round: data-offer-evaluate-100

Test an evaluate Transaction() Gateway method against the Node-JS `basic` Smart Contract method named `data-offer-query`. This method performs a get State on an item that matches an data Offer of size 100 bytes.

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

## Performance metrics for data-offer-evaluate-100

Name	Succ	Fail	Send Rate (TPS)	Max Latency (s)	Min Latency (s)	Avg Latency (s)	Throughput (TPS)
data-offer- evaluate-100	310	0	4.9	8.78	0.21	6.76	4.8

## Resource utilization for data-offer-evaluate-100

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



#### Basic information

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## Benchmark results

Summary

data-offer-evaluate-100
data-offer-evaluate-2000
data-offer-evaluate-4000
data-offer-evaluate-8000
data-offer-evaluate-16000
data-offer-evaluate-32000
data-offer-evaluate-32000
data-offer-evaluate-64000

data-offer-evaluate-8000-fixed-tps

## System under test

**Details** 

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

## Benchmark round: data-offer-evaluate-1000

Test an evaluate Transaction() Gateway method against the Node-JS `basic` Smart Contract method named `data-offer-query`. This method performs a get State on an item that matches an data Offer of size 1000 bytes.

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

## Performance metrics for data-offer-evaluate-1000

Name	Succ	Fail	Send Rate (TPS)	Max Latency (s)	Min Latency (s)	Avg Latency (s)	Throughput (TPS)
data-offer- evaluate-1000	343	0	5.3	9.29	0.34	6.69	5.2

## Resource utilization for data-offer-evaluate-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



#### Basic information

DLT: fabric Name: data-offer

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#### Summary

data-offer-evaluate-100
data-offer-evaluate-2000
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data-offer-evaluate-32000
data-offer-evaluate-64000
data-offer-evaluate-64000
data-offer-evaluate-8000-fixed-tps

## System under test

**Details** 

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		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
		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
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com
	1	1

## Benchmark round: data-offer-evaluate-2000

 $Test \ an \ evaluate Transaction () \ Gateway \ method \ against \ the \ NodeJS \ `basic` \ Smart \ Contract \ method \ named \ `data-offer-query`. \ This \ method \ performs \ a \ getState \ on \ an \ item \ that \ matches \ an \ data Offer \ of \ size \ 2000 \ bytes.$ 

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

## Performance metrics for data-offer-evaluate-2000

Name	Succ	Fail	Send Rate (TPS)	Max Latency (s)	Min Latency (s)	Avg Latency (s)	Throughput (TPS)
data-offer- evaluate-2000	360	0	6.1	9.27	1.10	7.42	5.9

## Resource utilization for data-offer-evaluate-2000

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



#### Basic information

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Benchmark Rounds: 9

**Details** 

## Benchmark results

Summary data-offer

data-offer-evaluate-100
data-offer-evaluate-2000
data-offer-evaluate-4000
data-offer-evaluate-8000
data-offer-evaluate-16000
data-offer-evaluate-32000
data-offer-evaluate-64000
data-offer-evaluate-64000
data-offer-evaluate-8000-fixed-tps

# System under test

**Details** 

dev.peer0.org2.example.com basic_1.0-637808600b25733249555557eadea170c68a949960070bb44fcd2688726576   orderer.example.com		Hyperledger Call	per Report
PeerCorgLexample.com			
PeerO.org2.example.com			orderer.example.com
Sum     Sum     Sum			peer0.org1.example.com
Couchdb0   Couchdb1			peer0.org2.example.com
couchdb1 dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576 dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576 dev-peer0.org2.example.com orderer.example.com peer0.org1.example.com  peer0.org2.example.com  peer0.org2.example.com  peer0.org2.example.com  peer0.org2.example.com  couchdb0  couchdb1  couchdb1  orderer.example.com  peer0.org1.example.com  peer0.org1.example.com  couchdb1  couchdb0  couchdb1  orderer.example.com  peer0.org1.example.com			ca_orderer
dev-peer0.org1.example.com-basic_1.0-   637b906e08b_257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576     dev-peer0.org2.example.com-basic_1.0-   637b906e08b_257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576     orderer.example.com			couchdb0
637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576     dev-peer0.org2.example.com-basic_1.0-   637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576     orderer.example.com			couchdb1
637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576  orderer.example.com  peer0.org1.example.com  peer0.org2.example.com  ca_orderer  write [nm])) by (name)  ca_orderer  couchdb0  couchdb1  orderer.example.com  peer0.org1.example.com  couchdb1  orderer.example.com  peer0.org2.example.com  couchdb1  couchdb1  orderer.example.com  peer0.org1.example.com  peer0.org2.example.com  ca_orderer  ca_orderer  couchdb1  orderer.example.com  peer0.org2.example.com  ca_orderer  ca_orderer  couchdb0  couchdb0  couchdb0  couchdb0  couchdb0  couchdb0  couchdb1  orderer.example.com  peer0.org2.example.com  couchdb0  couchdb1  orderer.example.com  peer0.org2.example.com  peer0.org2.example.com			
peer0.org1.example.com  peer0.org2.example.com  peer0.org2.example.com  peer0.org2.example.com  ca_orderer  ca_orderer  couchdb0  couchdb1  orderer.example.com  peer0.org1.example.com  peer0.org2.example.com  couchdb1  orderer.example.com  peer0.org2.example.com  peer0.org2.example.com  peer0.org2.example.com  ca_orderer  ca_orderer  ca_orderer  ca_orderer  peer0.org2.example.com			
Disc Write (Container_fs_writes_bytes_total{name=~",+"} ca_orderer    Couchdb0   Couchdb1   Couchdb0   Couchdb0   Couchdb1   Couchdb			orderer.example.com
Disc Write (MB)			peer0.org1.example.com
Write (MB)  [1m]) by (name)  ca_orderer  couchdb0  couchdb1  orderer.example.com  peer0.org1.example.com  Disc Read (MB)  [1m])) by (name)  ca_orderer  ca_orderer  ca_orderer  couchdb1  orderer.example.com  peer0.org2.example.com  ca_orderer  ca_orderer  ca_orderer  ca_orderer			peer0.org2.example.com
couchdb1 couchdb1 orderer.example.com peer0.org1.example.com peer0.org2.example.com  Disc Read (MB) sum(rate(container_fs_reads_bytes_total{name=~".+"} ca_orderer  couchdb0 couchdb1 orderer.example.com peer0.org1.example.com peer0.org1.example.com	Write		ca_orderer
orderer.example.com  peer0.org1.example.com  peer0.org2.example.com  peer0.org2.example.com  ca_orderer  ca_orderer  couchdb0  couchdb1  orderer.example.com  peer0.org1.example.com			couchdb0
peer0.org1.example.com  peer0.org2.example.com  Disc Read (MB) sum(rate(container_fs_reads_bytes_total{name=~".+"} ca_orderer  couchdb0  couchdb1  orderer.example.com  peer0.org1.example.com  peer0.org1.example.com			couchdb1
Disc Read (MB) sum(rate(container_fs_reads_bytes_total{name=~".+"} ca_orderer  couchdb0  couchdb1  orderer.example.com  peer0.org2.example.com  peer0.org2.example.com			orderer.example.com
Disc Read (MB) sum(rate(container_fs_reads_bytes_total{name=~".+"} ca_orderer  couchdb0  couchdb1  orderer.example.com  peer0.org1.example.com			peer0.org1.example.com
Read (MB) sum(rate(container_is_reads_bytes_total{name=~".+"} ca_orderer  ca_orderer  ca_orderer  ca_orderer  couchdb0  couchdb1  orderer.example.com  peer0.org1.example.com			peer0.org2.example.com
couchdb1 orderer.example.com peer0.org1.example.com	Read		ca_orderer
orderer.example.com peer0.org1.example.com			couchdb0
peer0.org1.example.com			couchdb1
			orderer.example.com
peer0.org2.example.com			peer0.org1.example.com
			peer0.org2.example.com

## Benchmark round: data-offer-evaluate-4000

Test an evaluate Transaction() Gateway method against the Node-JS `basic` Smart Contract method named `data-offer-query`. This method performs a get State on an item that matches an data Offer of size 4000 bytes.

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

## Performance metrics for data-offer-evaluate-4000

Name	Succ	Fail	Send Rate (TPS)	Max Latency (s)	Min Latency (s)	Avg Latency (s)	Throughput (TPS)
data-offer- evaluate-4000	400	0	6.0	9.13	0.20	6.18	5.9

## Resource utilization for data-offer-evaluate-4000

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



#### Basic information

DLT: fabric Name: data-offer

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Benchmark Rounds: 9

**Details** 

## Benchmark results

Summary

data-offer-evaluate-100
data-offer-evaluate-2000
data-offer-evaluate-4000
data-offer-evaluate-8000
data-offer-evaluate-16000
data-offer-evaluate-32000
data-offer-evaluate-32000
data-offer-evaluate-64000

data-offer-evaluate-8000-fixed-tps

## System under test

<u>Details</u>

bb44fcd2688726576
bb44fcd2688726576
bb44fcd2688726576
bb44fcd2688726576

## Benchmark round: data-offer-evaluate-8000

Test an evaluate Transaction() Gateway method against the Node-JS `basic` Smart Contract method named `data-offer-query`. This method performs a get State on an item that matches an data Offer of size 8000 bytes.

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

## Performance metrics for data-offer-evaluate-8000

Name	Succ	Fail	Send Rate (TPS)	Max Latency (s)	Min Latency (s)	Avg Latency (s)	Throughput (TPS)
data-offer- evaluate-8000	372	0	5.8	9.21	0.20	6.71	5.8

Resource utilization for data-offer-evaluate-8000



#### Basic information

DLT: fabric

Name: data-offer

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Benchmark Rounds: 9

**Details** 

## Benchmark results

Summary

data-offer-evaluate-100 data-offer-evaluate-1000

data-offer-evaluate-2000

data-offer-evaluate-4000

data-offer-evaluate-8000

data-offer-evaluate-16000

data-offer-evaluate-32000

data-offer-evaluate-64000 data-offer-evaluate-8000-fixed-tps

# 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
		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
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com
	<del>-</del>	

## Benchmark round: data-offer-evaluate-16000

 $Test \ an \ evaluate Transaction () \ Gateway \ method \ against \ the \ NodeJS \ `basic` \ Smart \ Contract \ method \ named \ `data-offer-query`. This method performs a getState on an item that matches an \ data-Offer \ of \ size 16000 \ bytes.$ 

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

## Performance metrics for data-offer-evaluate-16000

Name	Succ	Fail	Send Rate (TPS)	Max Latency (s)	Min Latency (s)	Avg Latency (s)	Throughput (TPS)
data-offer-evaluate- 16000	367	0	5.6	9.23	0.21	6.01	5.5



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Benchmark Rounds: 9

**Details** 

## Benchmark results

Summary

data-offer-evaluate-100
data-offer-evaluate-2000
data-offer-evaluate-4000
data-offer-evaluate-8000
data-offer-evaluate-16000
data-offer-evaluate-32000
data-offer-evaluate-64000
data-offer-evaluate-64000
data-offer-evaluate-8000-fixed-tps

## System under test

**Details** 

## Resource utilization for data-offer-evaluate-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
		peer0.org2.example.com
Disc Write (MB)	sum(rate(container_fs_writes_bytes_total{name=~".+"} [1m])) by (name)	ca_orderer
		couchdb0
		couchdb1
		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
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com

## Benchmark round: data-offer-evaluate-32000

Test an evaluate Transaction() Gateway method against the NodeJS `basic` Smart Contract method named `data-offer-query`. This method performs a getState on an item that matches an data Offer of size 32000 bytes.

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

Performance metrics for data-offer-evaluate-32000

Throughput

(TPS)

5.8

Latency (s)

6.97



	HYPERLEDGER	Name	Succ	Fail	Send Rate (TPS)	Max Latency (s)	Min Latency (s
V	CALIPER	data-offer-evaluate- 32000	360	0	5.8	9.17	0.22

#### Basic information

DLT: fabric Name: data-offer

Description: This testcase is to determine the large numbers of consumer query the dataOffer from application to check the scalability on hyperledger. Successive rounds create and retrieve dataoffer of larger byteSize.

Benchmark Rounds: 9

**Details** 

## Benchmark results

Summary

data-offer-evaluate-100 data-offer-evaluate-1000 data-offer-evaluate-2000 data-offer-evaluate-4000 data-offer-evaluate-8000 data-offer-evaluate-16000 data-offer-evaluate-32000 data-offer-evaluate-64000 data-offer-evaluate-8000-fixed-tps

## System under test

**Details** 

## Resource utilization for data-offer-evaluate-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
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
		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
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com

## Benchmark round: data-offer-evaluate-64000

Test an evaluateTransaction() Gateway method against the NodeJS `basic` Smart Contract method named `data-offer-query`. This method performs a getState on an item that matches an dataOffer of size 64000 bytes.

txDuration: 60 rateControl: type: fixed-load



DLT: fabric Name: data-offer

Description: This testcase is to determine the large numbers of consumer query the dataOffer from application to check the scalability on hyperledger. Successive rounds create and retrieve dataOffer of larger byteSize.

Benchmark Rounds: 9

**Details** 

## Benchmark results

Summary

data-offer-evaluate-100
data-offer-evaluate-2000
data-offer-evaluate-4000
data-offer-evaluate-8000
data-offer-evaluate-16000
data-offer-evaluate-32000
data-offer-evaluate-64000

data-offer-evaluate-8000-fixed-tps

## System under test

**Details** 

#### opts: transactionLoad: 50

## Performance metrics for data-offer-evaluate-64000

Name	Succ	Fail	Send Rate (TPS)	Max Latency (s)	Min Latency (s)	Avg Latency (s)	Throughput (TPS)
data-offer-evaluate- 64000	366	0	6.0	9.34	0.19	6.77	6.0

## Resource utilization for data-offer-evaluate-64000

## 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
		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
		orderer.example.com
		peer0.org1.example.com
		peer0.org2.example.com

Benchmark round: data-offer-evaluate-8000-fixed-tps



DLT: fabric

Name: data-offer

Description: This testcase is to determine the large numbers of consumer query the dataOffer from application to check the scalability on hyperledger. Successive rounds create and retrieve dataoffer of larger byteSize.

Benchmark Rounds: 9

**Details** 

## Benchmark results

#### Summary

data-offer-evaluate-100 data-offer-evaluate-1000 data-offer-evaluate-2000 data-offer-evaluate-4000 data-offer-evaluate-8000 data-offer-evaluate-16000 data-offer-evaluate-32000 data-offer-evaluate-64000 data-offer-evaluate-8000-fixed-tps

# System under test

**Details** 

Test an evaluateTransaction() Gateway method against the NodeJS `basic` Smart Contract method named `data-offer-query`. This method performs a getState on an item that matches an dataOffer of size 8000 bytes at a fixed TPS.

txDuration: 60 rateControl: type: fixed-rate opts: startingTps: 1

## Performance metrics for data-offer-evaluate-8000-fixed-tps

Name	Succ	Fail	Send Rate (TPS)	Max Latency (s)	Min Latency (s)	Avg Latency (s)	Throughput (TPS)
data-offer-evaluate- 8000-fixed-tps	610	0	10.2	34.87	1.57	22.01	7.4

## Resource utilization for data-offer-evaluate-8000-fixed-tps

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
		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
		orderer.example.com
		peer0.org1.example.com
. "	nerledgerCaliner/report html	10/12

peer0.org2.example.com



#### Basic information

DLT: fabric

Name: data-offer

Description: This testcase is to determine the large numbers of consumer query the dataOffer from application to check the scalability on hyperledger. Successive rounds create and retrieve dataOffer of larger byteSize.

Benchmark Rounds: 9

**Details** 

#### Benchmark results

Summary

data-offer-evaluate-100

data-offer-evaluate-1000

data-offer-evaluate-2000

data-offer-evaluate-4000

data-offer-evaluate-8000

data-offer-evaluate-16000

data-offer-evaluate-64000

data-offer-evaluate-8000-fixed-tps

#### System under test

**Details** 

## Test Environment

## benchmark config

```
name: data-offer
description: >
   This testcase is to determine the large numbers of consumer query the dataOffer from application to check the scalability on hyperledger. Successive
   rounds create and retrieve dataoffer of larger byteSize.
   number: 10
rounds:
      label: data-offer-evaluate-100
      description: >
         Test an evaluateTransaction() Gateway method against the NodeJS `basic` Smart Contract method named `data-offer-query`. This method performs a getState on an item that matches an dataOffer of size 100 bytes.
      chaincodeID: basic txDuration: 60
       rateControl:
         type: fixed-load opts:
             transactionLoad: 50
      workload:
         module: benchmarks/datamanagement/workloads/get-data-offer.js
         arguments:
            chaincodeID: basic
create_sizes:
- 100
                   1000
                   2000
                   4000
                   8000
                   16000
                   32000
                   64000
             byteSize: 100
      consensus: false
label: data-offer-evaluate-1000
      description: >-
Test an evaluateTransaction() Gateway method against the NodeJS `basic`
Smart Contract method named `data-offer-query`. This method performs a
getState on an item that matches an dataOffer of size 1000 bytes.
       chaincodeID: basic
       txDuration: 60
       rateControl:
         type: fixed-load opts:
             transactionLoad: 50
      workload:
         module: benchmarks/datamanagement/workloads/get-data-offer.js
         arguments
             chaincodeID: basic
             noSetup: true
byteSize: 1000
consensus: false
      label: data-offer-evaluate-2000
      description: >
         Test an evaluateTransaction() Gateway method against the NodeJS `basic` Smart Contract method named `data-offer-query`. This method performs a getState on an item that matches an dataOffer of size 2000 bytes.
      chaincodeID: basic
txDuration: 60
       rateControl:
         type: fixed-load opts:
             transactionLoad: 50
         module: benchmarks/datamanagement/workloads/get-data-offer.js
         arguments:
             chaincodeID: basic
noSetup: true
             byteSize: 2000 consensus: false
      label: data-offer-evaluate-4000
      description: >
         Test an evaluateTransaction() Gateway method against the NodeJS `basic`
Smart Contract method named `data-offer-query`. This method performs a
getState on an item that matches an dataOffer of size 4000 bytes.
      chaincodeID: basic txDuration: 60
      rateControl:
  type: fixed-load
             transactionLoad: 50
      workload:
         module: benchmarks/datamanagement/workloads/get-data-offer.js
         arguments:
             chaincodeID: basic
             noSetup: true
byteSize: 4000
consensus: false
     label: data-offer-evaluate-8000
description: >-
         Test an evaluateTransaction() Gateway method against the NodeJS `basic` Smart Contract method named `data-offer-query`. This method performs a getState on an item that matches an dataOffer of size 8000 bytes.
      chaincodeID: basic
      txDuration: 60
       rateControl:
         type: fixed-load
```



DLT: fabric Name: data-offer

Description: This testcase is to determine the large numbers of consumer query the dataOffer from application to check the scalability on hyperledger. Successive rounds create and retrieve dataOffer of larger byteSize.

Benchmark Rounds: 9

**Details** 

#### Benchmark results

Summary

data-offer-evaluate-100

data-offer-evaluate-1000

data-offer-evaluate-2000

data-offer-evaluate-4000

data-offer-evaluate-8000

data-offer-evaluate-16000

data-offer-evaluate-32000

data-offer-evaluate-64000 data-offer-evaluate-8000-fixed-tps

## System under test

**Details** 

```
transactionLoad: 50
  workload:
     module: benchmarks/datamanagement/workloads/get-data-offer.js
     arguments
         chaincodeID: basic
        noSetup: true
byteSize: 8000
consensus: false
  label: data-offer-evaluate-16000
  description: >
     Test an evaluateTransaction() Gateway method against the NodeJS `basic` Smart Contract method named `data-offer-query`. This method performs a getState on an item that matches an dataOffer of size 16000 bytes.
  chaincodeID: basic
  txDuration: 60
   rateControl:
     type: fixed-load opts:
        transactionLoad: 50
  workload:
     module: benchmarks/datamanagement/workloads/get-data-offer.js
     arguments:
         chaincodeID: basic
        noSetup: true
byteSize: 16000
consensus: false
- label: data-offer-evaluate-32000
  description: >
     Test an evaluateTransaction() Gateway method against the NodeJS `basic` Smart Contract method named `data-offer-query`. This method performs a getState on an item that matches an dataOffer of size 32000 bytes.
  chaincodeID: basic txDuration: 60
   rateControl:
     type: fixed-load opts:
         transactionLoad: 50
  workload:
     module: benchmarks/datamanagement/workloads/get-data-offer.is
     arguments:
        chaincodeID: basic
noSetup: true
byteSize: 32000
consensus: false
- label: data-offer-evaluate-64000
  description: >
     Test an evaluateTransaction() Gateway method against the NodeJS `basic` Smart Contract method named `data-offer-query`. This method performs a getState on an item that matches an dataOffer of size 64000 bytes.
  chaincodeID: basic
txDuration: 60
  rateControl:
     type: fixed-load opts:
         transactionLoad: 50
  workload:
     module: benchmarks/datamanagement/workloads/get-data-offer.js
     arguments:
         chaincodeID: basic
         noSetup: true
 consensus: false label: data-offer-evaluate-8000-fixed-tps
  description: >
     Test an evaluateTransaction() Gateway method against the NodeJS `basic`
Smart Contract method named `data-offer-query`. This method performs a
getState on an item that matches an dataOffer of size 8000 bytes at a
  fixed TPS.
chaincodeID: basic
   txDuration: 60
  rateControl:
      type: fixed-rate
     opts:
         startingTps: 1
  workload:
  module: benchmarks/datamanagement/workloads/get-data-offer.js
     arguments:
         chaincodeID: basic
         noSetup: true
byteSize: 8000
```

## **SUT**

not provided

consensus: false