

DLT: fabric

Name: get-data-offers

Description: This is a duration based benchmark targeting a Hyperledger Fabric network using the 'basic' NodeJS chaincode contract that is interacted with via a Fabric-SDK-Node Gateway. Each test round invokes the 'GetAllOffer()' API method.

Benchmark Rounds: 9

Details

Benchmark results

Summary
get-data-offer-evaluate
get-data-offer-evaluate-100
get-data-offer-evaluate-2000
get-data-offer-evaluate-2000
get-data-offer-evaluate-4000
get-data-offer-evaluate-8000
get-data-offer-evaluate-16000
get-data-offer-evaluate-32000
get-data-offer-evaluate-32000
get-data-offer-evaluate-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)
get-data-offer- evaluate	290	0	4.9	6.43	0.52	4.11	4.8
get-data-offer- evaluate-100	349	0	5.6	6.64	0.33	3.89	5.6
get-data-offer- evaluate-1000	338	0	5.5	6.34	0.28	3.79	5.4
get-data-offer- evaluate-2000	336	0	5.6	6.47	1.21	3.75	5.4
get-data-offer- evaluate-4000	300	0	4.7	6.39	0.23	4.30	4.7
get-data-offer- evaluate-8000	273	0	4.6	6.55	0.53	4.50	4.4
get-data-offer- evaluate-16000	282	0	4.5	6.44	0.68	4.00	4.4
get-data-offer- evaluate-32000	256	0	4.0	6.46	0.37	4.24	4.0
get-data-offer- evaluate-64000	326	0	5.3	6.63	0.89	4.43	5.2

Benchmark round: get-data-offer-evaluate

Test an evaluateTransaction() Gateway method against the NodeJS `basic` Smart Contract method named `GetAlldata-offer`. This method retrieves all data-offer schedules from the ledger.

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

Performance metrics for get-data-offer-evaluate

Name	Succ	Fail	Send Rate (TPS)	Max Latency (s)	Min Latency (s)	Avg Latency (s)	Throughput (TPS)
get-data-offer- evaluate	290	0	4.9	6.43	0.52	4.11	4.8

Resource utilization for get-data-offer-evaluate

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



DLT: fabric

Name: get-data-offers

Description: This is a duration based benchmark targeting a Hyperledger Fabric network using the 'basic' NodeJS chaincode contract that is interacted with via a Fabric-SDK-Node Gateway. Each test round invokes the 'GetAllOffer()' API method.

Benchmark Rounds: 9

Details

Benchmark results

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

System under test

Details

		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: get-data-offer-evaluate-100

Test an evaluateTransaction() Gateway method against the NodeJS `basic` Smart Contract method named `GetAlldata-offer`. This method retrieves all data-offer schedules from the ledger.

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

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

Name	Succ	Fail	Send Rate (TPS)	Max Latency (s)	Min Latency (s)	Avg Latency (s)	Throughput (TPS)
get-data-offer- evaluate-100	349	0	5.6	6.64	0.33	3.89	5.6

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

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



DLT: fabric

Name: get-data-offers

Description: This is a duration based benchmark targeting a Hyperledger Fabric network using the 'basic' NodeJS chaincode contract that is interacted with via a Fabric-SDK-Node Gateway. Each test round invokes the 'GetAllOffer()' API method.

Benchmark Rounds: 9

Details

Benchmark results

summary,
get-data-offer-evaluate
get-data-offer-evaluate-100
get-data-offer-evaluate-2000
get-data-offer-evaluate-2000
get-data-offer-evaluate-4000
get-data-offer-evaluate-8000
get-data-offer-evaluate-16000
get-data-offer-evaluate-32000
get-data-offer-evaluate-32000
get-data-offer-evaluate-64000

System under test

Details

Memory	Hyperleager Call	
(MB)		<u> </u>
		couchdb0
		couchdb1
		dev-peerl.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

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

Test an evaluateTransaction() Gateway method against the NodeJS `basic` Smart Contract method named `GetAlldata-offer`. This method retrieves all data-offer schedules from the ledger.

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



DLT: fabric

Name: get-data-offers

Description: This is a duration based benchmark targeting a Hyperledger Fabric network using the 'basic' NodeJS chaincode contract that is interacted with via a Fabric-SDK-Node Gateway. Each test round invokes the 'GetAllOffer()' API method.

Benchmark Rounds: 9

Details

Benchmark results

Summary,
get-data-offer-evaluate
get-data-offer-evaluate-100
get-data-offer-evaluate-2000
get-data-offer-evaluate-2000
get-data-offer-evaluate-4000
get-data-offer-evaluate-8000
get-data-offer-evaluate-16000
get-data-offer-evaluate-32000
get-data-offer-evaluate-64000

System under test

Details

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

Name	Succ	Fail	Send Rate (TPS)	Max Latency (s)	Min Latency (s)	Avg Latency (s)	Throughput (TPS)
get-data-offer- evaluate-1000	338	0	5.5	6.34	0.28	3.79	5.4

Resource utilization for get-data-offer-evaluate-1000

Resource monitor: prometheus							
Prometheus Query	Name						
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						
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						
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						
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						
	sum(container_memory_rss{name=~".+"}) by (name) sum(rate(container_cpu_usage_seconds_total{name=~".+"} [1m])) by (name) sum(rate(container_fs_writes_bytes_total{name=~".+"} [1m])) by (name) sum(rate(container_fs_writes_bytes_total{name=~".+"} sum(rate(container_fs_reads_bytes_total{name=~".+"}						



DLT: fabric

Name: get-data-offers

Description: This is a duration based benchmark targeting a Hyperledger Fabric network using the 'basic' NodeJS chaincode contract that is interacted with via a Fabric-SDK-Node Gateway. Each test round invokes the 'GetAllOffer()' API method.

Benchmark Rounds: 9

Details

Benchmark results

Summary

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

System under test

Details

 I .	
	peer0.org2.example.com

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

Test an evaluateTransaction() Gateway method against the NodeJS `basic` Smart Contract method named `GetAlldata-offer`. This method retrieves all data-offer schedules from the ledger.

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

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

Name	Succ	Fail	Send Rate (TPS)	Max Latency (s)	Min Latency (s)	Avg Latency (s)	Throughput (TPS)
get-data-offer- evaluate-2000	336	0	5.6	6.47	1.21	3.75	5.4

Resource utilization for get-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
		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



DLT: fabric

Name: get-data-offers

Description: This is a duration based benchmark targeting a Hyperledger Fabric network using the 'basic' NodeJS chaincode contract that is interacted with via a Fabric-SDK-Node Gateway. Each test round invokes the 'GetAllOffer()' API method.

Benchmark Rounds: 9

Details

Benchmark results

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

System under test

Details

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
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: get-data-offer-evaluate-4000

Test an evaluateTransaction() Gateway method against the NodeJS `basic` Smart Contract method named `GetAlldata-offer`. This method retrieves all data-offer schedules from the ledger.

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

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

Name	Succ	Fail	Send Rate (TPS)	Max Latency (s)	Min Latency (s)	Avg Latency (s)	Throughput (TPS)
get-data-offer- evaluate-4000	300	0	4.7	6.39	0.23	4.30	4.7

Resource utilization for get-data-offer-evaluate-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- 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	sum(rate(container_fs_writes_bytes_total{name=~".+"}	ca_orderer



DLT: fabric

Name: get-data-offers

Description: This is a duration based benchmark targeting a Hyperledger Fabric network using the 'basic' NodeJS chaincode contract that is interacted with via a Fabric-SDK-Node Gateway. Each test round invokes the 'GetAllOffer()' API method.

Benchmark Rounds: 9

Details

Benchmark results

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

System under test

Details

	, perieuge. ean	· · · · · · · · · · · · · · · · · · ·
Write (MB)	[1m])) by (name)	
	-	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: get-data-offer-evaluate-8000

Test an evaluateTransaction() Gateway method against the NodeJS `basic` Smart Contract method named `GetAlldata-offer`. This method retrieves all data-offer schedules from the ledger.

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

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

Name	Succ	Fail	Send Rate (TPS)	Max Latency (s)	Min Latency (s)	Avg Latency (s)	Throughput (TPS)
get-data-offer- evaluate-8000	273	0	4.6	6.55	0.53	4.50	4.4

Resource utilization for get-data-offer-evaluate-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



DLT: fabric

Name: get-data-offers

Description: This is a duration based benchmark targeting a Hyperledger Fabric network using the 'basic' NodeJS chaincode contract that is interacted with via a Fabric-SDK-Node Gateway. Each test round invokes the 'GetAllOffer()' API method.

Benchmark Rounds: 9

Details

Benchmark results

Summary,
get-data-offer-evaluate
get-data-offer-evaluate-100
get-data-offer-evaluate-2000
get-data-offer-evaluate-2000
get-data-offer-evaluate-4000
get-data-offer-evaluate-8000
get-data-offer-evaluate-16000
get-data-offer-evaluate-32000

get-data-offer-evaluate-64000

System under test

Details

dev-peer0.org2.example.com-basic_1.0-637b908e08b.257332d955d5b7eadeac170c68a9499b6070bb44fcd26887		Hyperledger Cali	iper Report
dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887 dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887 orderer.example.com peer0.org1.example.com peer0.org2.example.com peer0.org2.example.com ca_orderer (MB) (lmi)) by (name) couchdb0 couchdb1 dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887 dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887 orderer.example.com peer0.org1.example.com peer0.org2.example.com peer0.org3.example.com peer3.org3.example.com			couchdb0
637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887			couchdb1
637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887 orderer.example.com peer0.org1.example.com peer0.org1.example.com peer0.org2.example.com peer0.org2.example.com peer0.org2.example.com peer0.org2.example.com peer0.org2.example.com peer0.org2.example.com ca_orderer couchdb0 couchdb1 dev-peer0.org1.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887 dev-peer0.org2.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887 orderer.example.com peer0.org1.example.com peer0.org1.example.com peer0.org1.example.com peer0.org2.example.com peer0.org3.example.com peer0			dev-peer0.org1.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
peer0.org1.example.com peer0.org1.example.com peer0.org2.example.com peer0.org2.example.com peer0.org2.example.com peer0.org2.example.com peer0.org2.example.com peer0.org1.example.com-basic_1.0- ca_orderer couchdb0 couchdb1 dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887 dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887 orderer.example.com peer0.org1.example.com peer0.org1.example.com peer0.org2.example.com peer0.org3.example.com peer0.org3.example.com			dev-peer0.org2.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
Disc Write (MB)			orderer.example.com
Disc Write (MB)			peer0.org1.example.com
Write (MB) sum(rate(container_fs_writes_bytes_total{name==-0^n,+"}} ca_orderer couchdb0 couchdb1 dev-peer0.org1.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887 dev-peer0.org2.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887 orderer.example.com peer0.org1.example.com peer0.org1.example.com ca_orderer Lim(mate(container_fs_reads_bytes_total{name==-".+"}} ca_orderer couchdb0 couchdb0 couchdb1 dev-peer0.org1.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887			peer0.org2.example.com
couchdb1 dev-peer0.org1.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887 dev-peer0.org2.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887 orderer.example.com peer0.org1.example.com peer0.org1.example.com peer0.org2.example.com peer0.org2.example.com peer0.org2.example.com peer0.org2.example.com peer0.org2.example.com peer0.org2.example.com peer0.org2.example.com ca_orderer couchdb0 couchdb0 couchdb1 dev-peer0.org1.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887 dev-peer0.org1.example.com-basic_1.0-637b908e08b257332d95d5d5d5d5d5d5d5d5d5d5d5d5d5d5d5d5d5d5	Write		ca_orderer
dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887 dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887 orderer.example.com peer0.org1.example.com peer0.org2.example.com ca_orderer ca_orderer couchdb0 couchdb1 dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887			couchdb0
637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887 dev-peer0.org2.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887 orderer.example.com peer0.org1.example.com			couchdb1
G37b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887 orderer.example.com peer0.org1.example.com peer0.org2.example.com peer0.org2.example.com ca_orderer ca_orderer couchdb0 couchdb1 dev-peer0.org1.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887			dev-peer0.org1.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
peer0.org1.example.com peer0.org2.example.com peer0.org2.example.com ca_orderer (mB) couchdb0 couchdb1 dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887			dev-peer0.org2.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
peer0.org2.example.com Disc Read (MB) sum(rate(container_fs_reads_bytes_total{name=~".+"} ca_orderer couchdb0 couchdb1 dev-peer0.org1.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887			orderer.example.com
Disc Read (MB) sum(rate(container_fs_reads_bytes_total{name=~".+"}} ca_orderer couchdb0 couchdb1 dev-peer0.org1.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887			peer0.org1.example.com
Read (MB) sum(rate(container_is_reads_bytes_total{name=~".+"}} ca_orderer ca_orderer couchdb0 couchdb1 dev-peer0.org1.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887			peer0.org2.example.com
couchdb1 dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887	Read		ca_orderer
dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887			couchdb0
637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887			couchdb1
day_noor() org/) ayamnla com_hasic 1 ().			dev-peer0.org1.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
			dev-peer0.org2.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
orderer.example.com			orderer.example.com
peer0.org1.example.com			peer0.org1.example.com
peer0.org2.example.com			peer0.org2.example.com

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

Test an evaluateTransaction() Gateway method against the NodeJS `basic` Smart Contract method named `GetAlldata-offer`. This method retrieves all data-offer schedules from the ledger.

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

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

Name	Succ	Fail	Send Rate (TPS)	Max Latency (s)	Min Latency (s)	Avg Latency (s)	Throughput (TPS)
get-data-offer- evaluate-16000	282	0	4.5	6.44	0.68	4.00	4.4

Resource utilization for get-data-offer-evaluate-16000

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



DLT: fabric

Name: get-data-offers

Description: This is a duration based benchmark targeting a Hyperledger Fabric network using the 'basic' NodeJS chaincode contract that is interacted with via a Fabric-SDK-Node Gateway. Each test round invokes the 'GetAllOffer()' API method.

Benchmark Rounds: 9

Details

Benchmark results

Summary,
get-data-offer-evaluate
get-data-offer-evaluate-100
get-data-offer-evaluate-2000
get-data-offer-evaluate-2000
get-data-offer-evaluate-4000
get-data-offer-evaluate-8000
get-data-offer-evaluate-16000
get-data-offer-evaluate-32000
get-data-offer-evaluate-64000

System under test

Details

	Hyperledger Cali	рег керогт
		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: get-data-offer-evaluate-32000

 $Test\ an\ evaluate Transaction ()\ Gateway\ method\ against\ the\ NodeJS\ `basic`\ Smart\ Contract\ method\ named\ `GetAlldata-offer`.\ This\ method\ retrieves\ all\ data-offer\ schedules\ from\ the\ ledger.$

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

Performance metrics for get-data-offer-evaluate-32000



ъ.		
Basic	into	rmation

DLT: fabric

Name: get-data-offers

Description: This is a duration based benchmark targeting a Hyperledger Fabric network using the 'basic' NodeJS chaincode contract that is interacted with via a Fabric-SDK-Node Gateway. Each test round invokes the 'GetAllOffer()' API method.

Benchmark Rounds: 9

Details

Benchmark results

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

System under test

Details

Name	Succ	Fail	Send Rate (TPS)	Max Latency (s)	Min Latency (s)	Avg Latency (s)	Throughput (TPS)
]						
get-data-offer- evaluate-32000	256	0	4.0	6.46	0.37	4.24	4.0

Resource utilization for get-data-offer-evaluate-32000

dev-pert0.org2.example.com basic_1.0-6379908e08b2573329556b7eadeact70c58a9499b6070bb44fcd26887, orderer example.com per0.org1.example.com per0.org2.example.com per0.org2.example.com per0.org2.example.com ca_orderer couchdb0 couchdb1 dev-pert0.org2.example.com-basic_1.0-6379908e08b2573329556b7eadeact70c68a9499b6070bb44fcd26887, dev-per0.org2.example.com-basic_1.0-6379908e08b25733295565b7eadeact70c68a9499b6070bb44fcd26887, dev-per0.org2.example.com-basic_1.0-6379908e08b257333295565b7eadeact70c68a9499b6070bb44fcd26887, orderer.example.com per0.org2.example.com per0.org2.example.com per0.org2.example.com per0.org2.example.com per0.org2.example.com per0.org2.example.com per0.org2.example.com per0.org2.example.com ca_orderer couchdb0 couchdb1 dev-per0.org2.example.com-basic_1.0-6379908e08b2573339556b7eadeact70c68a9499b6070bb44fcd26887, dev-per0.org2.example.com-basic_1.0-6379908e08b2573339556b7eadeact70c68a9499b6070bb44fcd26887, orderer.example.com per0.org1.example.com per0.org1.example.com per0.org2.example.com per0.org2.example.com	Metric	Prometheus Query	Name
couchdb1	Memory	sum(container_memory_rss{name=~".+"}) by (name)	ca_orderer
dev-peerd.orgl.example.com-basic_LD-63789086082573324955d5b7roudex170x68a949986070bb44fcd26887. dev-peerd.orgl.example.com			couchdb0
G3799080808257332855565b7sadeact70c68is499b6070bb44fcd26887. dev-peer0.org2.example.com-basic_1.0- G379090808557332855565b7sadeact70c68is499b6070bb44fcd26887. orderer_example.com peer0.org2.example.com peer0.org2.example.com couchdb1 dev-peer0.org2.example.com-basic_1.0- G379908c08b25733289556b7sadeact70c68is499b6070bb44fcd26887. dev-peer0.org2.example.com-basic_1.0- G379908c08b25733289556b7sadeact70c68is499b6070bb44fcd26887. dev-peer0.org2.example.com-basic_1.0- G379908c08b2573328956db7sadeact70c68is499b6070bb44fcd26887. dev-peer0.org2.example.com-basic_1.0- garderer_example.com-basic_1.0- couchdb1 dev-peer0.org2.example.com-basic_1.0- G379908c08b2573328956db7sadeact70c68is499b6070bb44fcd26887.			couchdb1
6379998e08b.2573329556b7eadeac170c58a9499b6070bb44fcd26887. orderer_example.com			dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
peefl.org1.example.com peefl.org2.example.com peefl.org2.example.com peefl.org2.example.com peefl.org2.example.com ca_orderer ca_order			dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
Disc Write (MB)			orderer.example.com
CPU (%) sum(rate(container_cpu_usage_seconds_total(name=>"+") ca_orderer ca_orderer couchdb0 couchdb1 couchdb1 dev-peerd.org1.example.com-basic_1.0-637h908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887. dev-peerd.org2.example.com-basic_1.0-637h908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887. dev-peerd.org2.example.com peerd.org2.example.com peerd.org2.example.com peerd.org2.example.com ca_orderer (lm)) by (name) ca_orderer ca_ordere			peer0.org1.example.com
Ca_orderer Ca_orderer			peer0.org2.example.com
couchdb1			ca_orderer
dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887. dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887. orderer.example.com peer0.org1.example.com peer0.org2.example.com peer0.org2.example.com ca_orderer initiate(container_fs_writes_bytes_total{name=~".+"} ca_orderer couchdb0			couchdb0
637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887. dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887. orderer.example.com peer0.org2.example.com peer0.org2.example.com peer0.org2.example.com peer0.org2.example.com peer0.org2.example.com peer0.org2.example.com peer0.org2.example.com peer0.org2.example.com peer0.org2.example.com ca_orderer (Im)) by (name) ca_orderer dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887. dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887. orderer.example.com peer0.org2.example.com peer0.org2.example.com peer0.org2.example.com ca_orderer lim)) by (name) ca_orderer dev-peer0.org2.example.com peer0.org2.example.com dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887. dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887. dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887.			couchdb1
637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887. orderer.example.com peer0.org1.example.com peer0.org2.example.com peer0.org2.example.com ca_orderer [mm]]) by (name) couchdb1 dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887. dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887. orderer.example.com peer0.org2.example.com peer0.org2.example.com ca_orderer ca_orderer dev-peer0.org2.example.com ca_orderer dev-peer0.org2.example.com peer0.org1.example.com ca_orderer ca_orderer dev-peer0.org2.example.com dev-peer0.org2.example.com dev-peer0.org2.example.com dev-peer0.org2.example.com ca_orderer ca_orderer dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887. dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887.			dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
peer0.org1.example.com peer0.org2.example.com peer0.org2.example.com peer0.org2.example.com peer0.org2.example.com peer0.org2.example.com peer0.org2.example.com ca_orderer couchdb0 couchdb1 dev-peer0.org1.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd268872 dev-peer0.org2.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd268872 orderer.example.com peer0.org1.example.com peer0.org2.example.com peer0.org3.example.com dev-peer0.org3.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd268872 dev-peer0.org3.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd268872 dev-peer0.org2.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd268872 dev-peer0.or			dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
Disc			orderer.example.com
Disc			peer0.org1.example.com
Write (MB) sum(rate(container_ts_writes_bytes_total {name=~".+"}} ca_orderer couchdb0 couchdb1 dev-peer0.org1.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887. dev-peer0.org2.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887. dev-peer0.org1.example.com peer0.org1.example.com peer0.org2.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_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887. dev-peer0.org2.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd26887.			peer0.org2.example.com
couchdb1	Write		ca_orderer
dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd268872 dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd268872 orderer.example.com peer0.org1.example.com peer0.org2.example.com ca_orderer ca_orderer couchdb0 couchdb1 dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd268872 dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd268872			couchdb0
637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd268873 dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd268873 orderer.example.com peer0.org1.example.com peer0.org2.example.com ca_orderer ca_orderer couchdb0 couchdb1 dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd268873 dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd268873			couchdb1
637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd268872 orderer.example.com peer0.org1.example.com peer0.org2.example.com ca_orderer ca_orderer couchdb0 couchdb1 dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd268872 dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd268872			dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
peer0.org1.example.com			dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
Disc Read (MB) sum(rate(container_fs_reads_bytes_total{name=~".+"} ca_orderer			orderer.example.com
Disc Read (MB) sum(rate(container_fs_reads_bytes_total{name=~".+"}} ca_orderer Couchdb0 couchdb1 dev-peer0.org1.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd268872 dev-peer0.org2.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd268872			peer0.org1.example.com
Read (MB) sum(rate(container_ts_reads_bytes_total{name=~".+"}} ca_orderer ca_orderer couchdb0 couchdb1 dev-peer0.org1.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd268872 dev-peer0.org2.example.com-basic_1.0-637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd268872			peer0.org2.example.com
couchdb1 dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd268872 dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd268872	Read		ca_orderer
dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd268872 dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd268872			couchdb0
637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd268872 dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd268872			couchdb1
637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd268872			dev-peer0.org1.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
orderer.example.com			dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726576
			orderer.example.com
peer0.org1.example.com			peer0.org1.example.com
peer0.org2.example.com			peer0.org2.example.com



DLT: fabric

Name: get-data-offers

Description: This is a duration based benchmark targeting a Hyperledger Fabric network using the 'basic' NodeJS chaincode contract that is interacted with via a Fabric-SDK-Node Gateway. Each test round invokes the 'GetAllOffer()' API method.

Benchmark Rounds: 9

Details

Benchmark results

Summary

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

System under test

Details

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

Test an evaluateTransaction() Gateway method against the NodeJS `basic` Smart Contract method named `GetAlldata-offer`. This method retrieves all data-offer schedules from the ledger.

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

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

Name	Succ	Fail	Send Rate (TPS)	Max Latency (s)	Min Latency (s)	Avg Latency (s)	Throughput (TPS)
get-data-offer- evaluate-64000	326	0	5.3	6.63	0.89	4.43	5.2

$Resource\ utilization\ for\ get-data-offer-evaluate-64000$

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- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726570			
		dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726570			
		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- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726570			
		dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726570			
		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- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726570			
		dev-peer0.org2.example.com-basic_1.0- 637b908e08b257332d955d5b7eadeac170c68a9499b6070bb44fcd2688726570			
		orderer.example.com			
		peer0.org1.example.com			
		peer0.org2.example.com			
Disc Read	sum(rate(container_fs_reads_bytes_total{name=~".+"} [1m])) by (name)	ca_orderer			



DLT: fabric

Name: get-data-offers

Description: This is a duration based benchmark targeting a Hyperledger Fabric network using the 'basic' NodeJS chaincode contract that is interacted with via a Fabric-SDK-Node Gateway. Each test round invokes the 'GetAllOffer()' API method.

Benchmark Rounds: 9

Details

Benchmark results

<u>Summary</u>

get-data-offer-evaluate

get-data-offer-evaluate-100

get-data-offer-evaluate-1000

get-data-offer-evaluate-2000

get-data-offer-evaluate-4000 get-data-offer-evaluate-8000

get-data-offer-evaluate-16000

get-data-offer-evaluate-32000

get-data-offer-evaluate-64000

System under test

Details

(MB)	
	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: get-data-offers
description: >
  This is a duration based benchmark targeting a Hyperledger Fabric network using the `basic` NodeJS chaincode contract that is interacted with via a Fabric-SDK-Node Gateway. Each test round invokes the 'GetAllOffer()' API
workers:
number: 10
rounds:
- label: get-data-offer-evaluate
     description: >
    Test an evaluateTransaction() Gateway method against the NodeJS `basic`
    Smart Contract method named `GetAlldata-offer`. This method retrieves all
    data-offer schedules from the ledger.
chaincodeID: basic

**Purpraties** 60
      txDuration: 60
      rateControl:
         type: fixed-load
         opts:
     transactionLoad: 20 workload:
         module: benchmarks/datamanagement/workloads/get-data-offer.js
         arguments:
            chaincodeID: basic
     label: get-data-offer-evaluate-100 description: >
         Test an evaluateTransaction() Gateway method against the NodeJS `basic`
Smart Contract method named `GetAlldata-offer`. This method retrieves all
      data-offer schedules from the ledger.
chaincodeID: basic
      txDuration: 60
      rateControl:
         type: fixed-load
         opts:
            transactionLoad: 20
      workload:
         module: benchmarks/datamanagement/workloads/get-data-offer.js
         arguments:
            chaincodeID: basic
            byteSize: 100 consensus: false
   - label: get-data-offer-evaluate-1000
      description: >
         Test an evaluateTransaction() Gateway method against the NodeJS `basic`
Smart Contract method named `GetAlldata-offer`. This method retrieves all
      data-offer schedules from the ledger.
chaincodeID: basic
      txDuration: 60
      rateControl:
         type: fixed-load
         opts:
            transactionLoad: 20
         module: benchmarks/datamanagement/workloads/get-data-offer.js
         arguments:
            chaincodeTD: basic
     byteSize: 1000
consensus: false
label: get-data-offer-evaluate-2000
     Test an evaluateTransaction() Gateway method against the NodeJS `basic` Smart Contract method named `GetAlldata-offer`. This method retrieves all data-offer schedules from the ledger. chaincodeID: basic typuration: 60
      txDuration: 60
      rateControl:
         type: fixed-load
         opts:
            transactionLoad: 20
      workload:
module: benchmarks/datamanagement/workloads/get-data-offer.js
         arguments:
            chaincodeID: basic
            byteSize: 2000
             consensus: false
     label: get-data-offer-evaluate-4000
      description: >
         Test an evaluateTransaction() Gateway method against the NodeJS `basic` Smart Contract method named `GetAlldata-offer`. This method retrieves all
```



DLT: fabric

Name: get-data-offers

Description: This is a duration based benchmark targeting a Hyperledger Fabric network using the 'basic' NodeJS chaincode contract that is interacted with via a Fabric-SDK-Node Gateway. Each test round invokes the 'GetAllOffer()' API method.

Benchmark Rounds: 9

Details

Benchmark results

Summary

get-data-offer-evaluate
get-data-offer-evaluate-100
get-data-offer-evaluate-2000
get-data-offer-evaluate-2000
get-data-offer-evaluate-4000
get-data-offer-evaluate-8000
get-data-offer-evaluate-16000

get-data-offer-evaluate-32000

get-data-offer-evaluate-64000

System under test

Details

```
data-offer schedules from the ledger. chaincodeID: basic
  txDuration: 60
rateControl:
     type: fixed-load
     opts:
  transactionLoad: 20 workload:
     module: benchmarks/datamanagement/workloads/get-data-offer.js
     arguments:
   chaincodeID: basic
        byteSize: 4000
consensus: false
- label: get-data-offer-evaluate-8000
  description: >
  Test an evaluateTransaction() Gateway method against the NodeJS `basic`
Smart Contract method named `GetAlldata-offer`. This method retrieves all
data-offer schedules from the ledger.
chaincodeID: basic
   txDuration: 60
   rateControl:
     type: fixed-load
     opts:
transactionLoad: 20
  workload:
     module: benchmarks/datamanagement/workloads/get-data-offer.js
     arguments:
        chaincodeID: basic
        byteSize: 8000 consensus: false
  label: get-data-offer-evaluate-16000
 description: >
Test an evaluateTransaction() Gateway method against the NodeJS `basic`
Smart Contract method named `GetAlldata-offer`. This method retrieves all
data-offer schedules from the ledger.
chaincodeID: basic

**PowerField (6)
   txDuration: 60
   rateControl:
     type: fixed-load opts:
        transactionLoad: 20
  workload:
     \begin{tabular}{ll} module: benchmarks/datamanagement/workloads/get-data-offer.js \\ arguments: \end{tabular}
         chaincodeID: basic
 byteSize: 16000
consensus: false
label: get-data-offer-evaluate-32000
  description: >
     Test an evaluateTransaction() Gateway method against the NodeJS `basic`
Smart Contract method named `GetAlldata-offer`. This method retrieves all
  data-offer schedules from the ledger.
chaincodeID: basic
  txDuration: 60 rateControl:
     type: fixed-load
     opts:
  transactionLoad: 20 workload:
     module: benchmarks/datamanagement/workloads/get-data-offer.js
     arguments:
   chaincodeID: basic
        byteSize: 23000 consensus: false
 label: get-data-offer-evaluate-64000
  description: >
  Test an evaluateTransaction() Gateway method against the NodeJS `basic` Smart Contract method named `GetAlldata-offer`. This method retrieves all data-offer schedules from the ledger. chaincodeID: basic
   txDuration: 60
  rateControl:
  type: fixed-load
     opts:
transactionLoad: 20
  workload:
     module: benchmarks/datamanagement/workloads/get-data-offer.js
     arguments:
         chaincodeID: basic
         byteSize: 64000
        consensus: false
```

SUT

not provided