

# Ignite Performance -3Nodes

## 1. 3 Nodes

- Hardware
  - CPU: 32 Core
  - Mem: 128G
- Test Configuration
  - Thread: 128
  - BACKUP: 1
  - JDK: 1.8

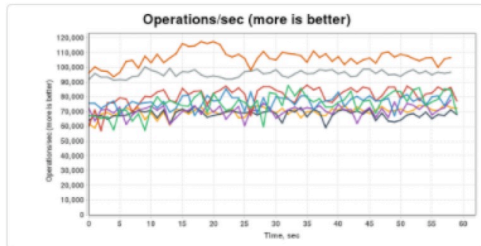
### 1.1 Result Summary-TX:OPTIMISTIC/SERIALIZABLE

TransactionConcurrency	TransactionIsolation
OPTIMISTIC	SERIALIZABLE

Result:

■	IgnitePutBenchmark	RELEASE-atomic-put-1-backup
■	IgnitePutGetBenchmark	RELEASE-atomic-put-get-1-backup
■	IgnitePutTxBenchmark	RELEASE-tx-put-1-backup
■	IgniteGetAndPutTxBenchmark	RELEASE-tx-getAndPut-1-backup
■	IgniteInvokeTxBenchmark	RELEASE-tx-invoke-1-backup
■	IgnitePutGetTxBenchmark	RELEASE-tx-put-get-1-backup
■	IgniteSqlQueryBenchmark	RELEASE-sql-query-1-backup
■	IgniteSqlQueryJoinBenchmark	RELEASE-sql-query-join-1-backup

#### ThroughputLatencyProbe



	Avg	Min	Max	SD
■	75,559.25	57,295.00	87,676.00	6,996.43
■	76,752.02	66,949.00	85,575.00	4,178.17
■	80,861.15	56,960.00	88,026.00	6,307.22
■	70,557.17	60,493.00	77,992.00	3,907.56
■	68,263.67	59,157.00	73,411.00	2,891.30
■	69,861.92	58,908.00	74,570.00	3,266.82
■	106,478.93	93,725.00	117,475.00	5,257.71
■	95,720.29	91,330.00	100,316.00	2,258.60



	Avg	Min	Max	SD
■	1,708,182.74	1,460,040.01	2,246,466.57	172,266.46
■	1,671,823.10	1,495,189.17	1,910,748.77	95,033.43
■	1,592,611.48	1,453,185.82	2,246,123.42	146,872.94
■	1,818,795.79	1,640,347.14	2,109,719.39	101,207.20
■	1,876,513.25	1,754,797.87	2,163,035.21	82,708.69
■	1,834,265.99	1,691,727.56	2,170,915.72	91,447.74
■	1,204,181.18	1,088,651.68	1,364,033.87	59,115.47
■	1,336,783.81	1,274,843.09	1,414,710.31	31,810.38

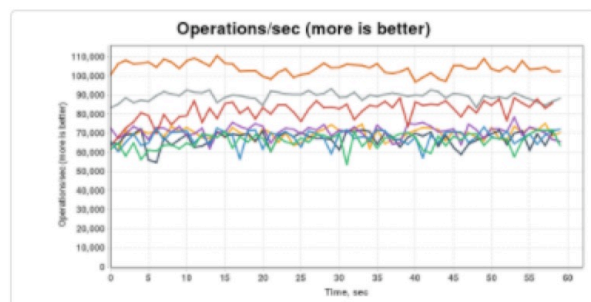
## 1.2 Result Summary-TX:OPTIMISTIC/REPEATABLE-READ

TransactionConcurrency	TransactionIsolation
OPTIMISTIC	REPEATABLE-READ

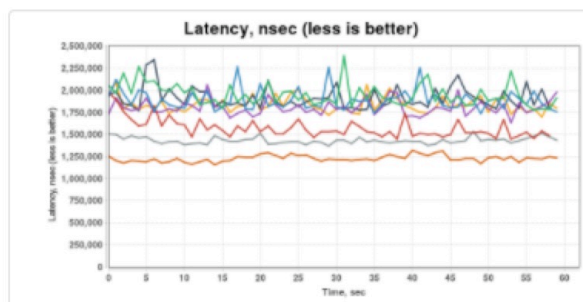
Result:

■	IgnitePutBenchmark	RELEASE-atomic-put-1-backup
■	IgnitePutGetBenchmark	RELEASE-atomic-put-get-1-backup
■	IgnitePutTxBenchmark	RELEASE-tx-put-1-backup
■	IgniteGetAndPutTxBenchmark	RELEASE-tx-getAndPut-1-backup
■	IgniteInvokeTxBenchmark	RELEASE-tx-invoke-1-backup
■	IgnitePutGetTxBenchmark	RELEASE-tx-put-get-1-backup
■	IgniteSqlQueryBenchmark	RELEASE-sql-query-1-backup
■	IgniteSqlQueryJoinBenchmark	RELEASE-sql-query-join-1-backup

### ThroughputLatencyProbe



	Avg	Min	Max	SD
■	65,787.17	53,472.00	71,813.00	4,043.51
■	67,808.43	56,439.00	73,301.00	3,799.19
■	81,703.02	63,759.00	88,533.00	5,220.00
■	71,004.70	62,026.00	78,210.00	3,316.68
■	67,028.07	54,640.00	72,276.00	3,975.35
■	69,676.23	61,130.00	75,169.00	3,177.29
■	104,083.33	96,864.00	110,578.00	3,069.79
■	89,294.73	83,324.00	93,154.00	2,278.70



	Avg	Min	Max	SD
■	1,952,110.09	1,778,126.73	2,390,886.37	127,484.73
■	1,892,388.13	1,739,858.26	2,266,497.53	119,731.54
■	1,572,995.85	1,445,653.60	1,973,048.46	108,020.50
■	1,804,890.31	1,635,507.94	2,061,465.22	86,947.03
■	1,916,325.99	1,769,684.04	2,343,922.99	123,094.97
■	1,838,890.04	1,701,637.81	2,092,383.76	87,094.92
■	1,229,168.95	1,156,953.50	1,321,067.49	36,286.92
■	1,432,591.99	1,372,892.71	1,535,022.85	36,278.28

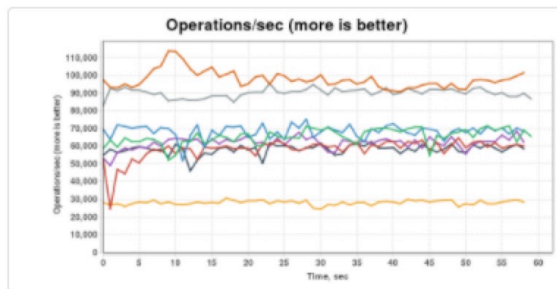
## 1.3 Result Summary-TX:PESSIMISTIC/REPEATABLE-READ

TransactionConcurrency	TransactionIsolation
PESSIMISTIC	REPEATABLE-READ

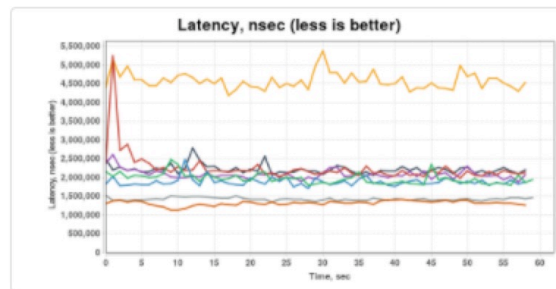
Result:

■	IgnitePutBenchmark	RELEASE-atomic-put-1-backup
■	IgnitePutGetBenchmark	RELEASE-atomic-put-get-1-backup
■	IgnitePutTxBenchmark	RELEASE-tx-put-1-backup
■	IgniteGetAndPutTxBenchmark	RELEASE-tx-getAndPut-1-backup
■	IgniteInvokeTxBenchmark	RELEASE-tx-invoke-1-backup
■	IgnitePutGetTxBenchmark	RELEASE-tx-put-get-1-backup
■	IgniteSqlQueryBenchmark	RELEASE-sql-query-1-backup
■	IgniteSqlQueryJoinBenchmark	RELEASE-sql-query-join-1-backup

### ThroughputLatencyProbe



	Avg	Min	Max	SD
■	65,482.85	51,950.00	71,389.00	4,339.84
■	68,353.27	51,814.00	75,222.00	3,733.21
■	58,167.95	24,421.00	64,676.00	5,864.25
■	61,760.32	49,000.00	68,356.00	3,349.84
■	58,126.61	46,040.00	62,531.00	2,843.44
■	28,064.54	24,575.00	30,622.00	1,218.07
■	97,733.32	90,839.00	113,807.00	4,859.35
■	90,109.67	82,906.00	95,471.00	2,439.94



	Avg	Min	Max	SD
■	1,962,105.90	1,793,377.66	2,466,775.41	140,109.60
■	1,878,805.18	1,702,005.13	2,467,759.97	113,212.73
■	2,239,403.28	1,973,228.02	5,235,344.28	427,158.61
■	2,077,346.78	1,871,761.56	2,608,547.43	120,964.36
■	2,209,937.08	2,046,337.31	2,779,451.23	123,082.84
■	4,572,286.60	4,177,708.36	5,369,232.47	220,368.02
■	1,311,510.51	1,123,761.77	1,408,015.56	61,846.79
■	1,419,653.59	1,339,373.84	1,521,054.28	37,786.60

## 1.4 Result Summary-TX:PESSIMISTIC/SERIALIZABLE

TransactionConcurrency	TransactionIsolation
PESSIMISTIC	SERIALIZABLE

Result:

Color	Benchmark	Configurations
■	IgnitePutBenchmark	RELEASE-atomic-put-1-backup
■	IgnitePutGetBenchmark	RELEASE-atomic-put-get-1-backup
■	IgnitePutTxBenchmark	RELEASE-tx-put-1-backup
■	IgniteGetAndPutTxBenchmark	RELEASE-tx-getAndPut-1-backup
■	IgniteInvokeTxBenchmark	RELEASE-tx-invoke-1-backup
■	IgnitePutGetTxBenchmark	RELEASE-tx-put-get-1-backup
■	IgniteSqlQueryBenchmark	RELEASE-sql-query-1-backup
■	IgniteSqlQueryJoinBenchmark	RELEASE-sql-query-join-1-backup

## ThroughputLatencyProbe



	Avg	Min	Max	SD
■	64,052.12	46,838.00	71,805.00	4,070.93
■	70,170.78	53,719.00	77,898.00	4,696.39
■	60,259.70	46,318.00	68,101.00	4,014.97
■	62,047.32	51,964.00	67,193.00	3,013.63
■	60,689.83	55,058.00	66,403.00	2,773.64
■	28,584.03	25,237.00	31,662.00	1,246.21
■	107,040.42	100,418.00	116,671.00	3,621.71
■	92,543.58	87,278.00	97,616.00	2,421.15



	Avg	Min	Max	SD
■	2,005,853.18	1,781,259.06	2,734,629.21	143,235.16
■	1,831,313.60	1,643,235.57	2,381,519.29	135,546.94
■	2,132,155.23	1,867,400.68	2,737,651.08	151,551.68
■	2,065,700.83	1,903,986.26	2,418,966.65	97,646.81
■	2,112,990.66	1,926,010.25	2,343,763.79	99,299.93
■	4,486,348.42	4,045,762.89	5,071,230.17	196,566.86
■	1,196,397.02	1,103,088.11	1,270,787.96	39,002.05
■	1,382,882.40	1,310,499.24	1,464,811.36	35,376.48