

Machine	No of Random Reads	Workload configuration (Distinct pairs Matches)	Write configuration for RocksDB	Write performance(time in seconds)		Ratio (Jena BPT / RocksDB)	Read configuration for RocksDB	Read performance (time in seconds)		Ratio (Jena BPT / RocksDB)	Disk space occupied(In MB)		Ratio (Jena BPT / RocksDB)	
				RocksDB	Jena BPT			RocksDB	Jena BPT		RocksDB	Jena BPT		
Machine 1	100	100 10000	default	5.7416	15.8196	275.53%	default	3.5393	0.7035	19.88%	134	461	344.03%	
	100	100 10000	default	5.7416	15.8196	275.53%	default with readAhead size = 32*1024 bytes	3.3972	0.7035	20.71%	134	461	344.03%	
	100	100 10000	default	5.7416	15.8196	275.53%	default with readAhead size = 128*1024 bytes	3.0616	0.7035	22.98%	134	461	344.03%	
	100	100 10000	default	5.7416	15.8196	275.53%	default with readAhead size = 256*1024 bytes	3.8116	0.7035	18.46%	134	461	344.03%	
	1000	1000 10000	default	6.0851	16.4224	269.88%	default	3.4690	0.6937	20.00%	134	461	344.03%	
	1000	1000 10000	default	6.0851	16.4224	269.88%	default with readAhead size = 32*1024 bytes	3.2016	0.6937	21.67%	134	461	344.03%	
	1000	1000 10000	default	6.0851	16.4224	269.88%	default with readAhead size = 128*1024 bytes	3.0844	0.6937	22.49%	134	461	344.03%	
	1000	1000 10000	default	6.0851	16.4224	269.88%	default with readAhead size = 256*1024 bytes	3.2412	0.6937	21.40%	134	461	344.03%	
	10000	10000 1000	default	5.9441	14.9886	252.16%	default	3.7185	0.7678	20.65%	134	461	344.03%	
	100000	100000 100	default	6.0406	14.3715	237.92%	default	5.2579	1.1142	21.19%	136	465	341.91%	
	100000	100000 100	default	6.0406	14.3715	237.92%	default with readAhead size = 1024 bytes	5.5947	1.1142	19.92%	136	465	341.91%	
	100000	100000 100	default	6.0406	14.3715	237.92%	default with readAhead size = 8*1024 bytes	5.7011	1.1142	19.54%	136	465	341.91%	
	100000	100000 100	default	6.0406	14.3715	237.92%	default with readAhead size = 128*1024 bytes	6.5690	1.1142	16.96%	136	465	341.91%	
	100000	100000 100	default with directio enabled	5.9872	14.3715	240.04%	default with directio enabled	8.9706	1.1142	12.42%	136	465	341.91%	
	100000	100000 100	data block size = 64 bytes	6.3038	14.3715	227.98%	data block size = 64 bytes	11.6560	1.1142	9.56%	268	465	173.51%	
	100000	100000 100	data block size = 128 bytes	6.2692	14.3715	229.24%	data block size = 128 bytes	7.5091	1.1142	14.84%	182	465	255.49%	
	100000	100000 100	data block size = 512 bytes	6.6278	14.3715	216.84%	data block size = 512 bytes	5.0867	1.1142	21.90%	147	465	316.33%	
	100000	100000 100	data block size = 1024 bytes	6.3681	14.3715	225.68%	data block size = 1024 bytes	5.2183	1.1142	21.35%	140	465	332.14%	
	100000	100000 100	data block size = 4*1024 bytes	6.6151	14.3715	217.25%	data block size = 4*1024 bytes	5.6711	1.1142	19.65%	136	465	341.91%	
	100000	100000 100	data block size = 16*1024 bytes	6.6893	14.3715	214.84%	data block size = 16*1024 bytes	9.6767	1.1142	11.51%	134	465	347.01%	
	100000	100000 100	data block size = 32*1024 bytes	6.5364	14.3715	219.87%	data block size = 32*1024 bytes	14.6724	1.1142	7.59%	134	465	347.01%	
	100000	100000 100	Disable compression	6.1198	14.3715	234.84%	Disable compression	3.7361	1.1142	29.82%	140	465	332.14%	
	100000	100000 100	Disable compression and checksum	6.7633	14.3715	212.49%	Disable compression and checksum	3.7032	1.1142	30.09%	140	465	332.14%	
								Prefix Bloom filter size = 10 bits ; Prefix extractor = CappedPrefixTransform ; Prefix size = 16 bytes	5.4595	1.1142	20.41%	72	465	645.83%
								Mentable bloom filter size ratio = 10%	5.2327	1.1142	21.29%	136	465	341.91%
								Mentable bloom filter size ratio = 25%	5.2411	1.1142	21.26%	136	465	341.91%
								Prefix Bloom filter* with mentable bloom filter = 25%	5.7437	1.1142	19.40%	212	465	219.34%
								Prefix Bloom filter* with mentable bloom filter = 25% and blocking unnecessary IO	5.7303	1.1142	19.44%	212	465	219.34%
								default	25.5561	3.5095	13.73%	154	507	329.22%
	Machine 2	1000000	1000000 100	default	41.8304	115.408	275.90%	default	62.4660	7.0390	11.27%	742	4600	619.95%
1000000		1000000 100	custom configs**	46.7662	115.408	246.78%	custom configs**	44.4457	7.0390	15.84%	784	4600	586.73%	
1000000		1000000 100	custom configs** with max open files =2000	45.1696	115.408	255.50%	custom configs** with max open files =2000	41.8457	7.0390	16.82%	784	4600	586.73%	
1000000		1000000 100	default	44.8060	121.477	271.12%	Compacted into Single SST***, no bloom filter, no compression (RocksDb Java)	34.7649	7.0390	20.25%	1400	4600	328.57%	
1000000		1000000 100	Disable compression and checksum	42.5988	121.477	285.17%	Disable compression and checksum	43.4521	7.0390	16.20%	1400	4600	328.57%	
1000000		1000000 100	Disable compression	42.9731	121.477	282.68%	Disable compression	45.0402	7.0390	15.63%	1400	4600	328.57%	
1000000		1000000 100	Disable checksum	42.3029	121.477	287.16%	Disable checksum	61.9078	7.0390	11.37%	742	4600	619.95%	
Prefix Bloom filter configs*	Prefix Bloom filter size = 10 bits; Prefix extractor = CappedPrefixTransform; Prefix size = 16 bytes													
custom configs**	RocksDbKVStoreConfig3 in codebase													
Compacted into Single SST***	Using LDB tool provided by RocksDb													