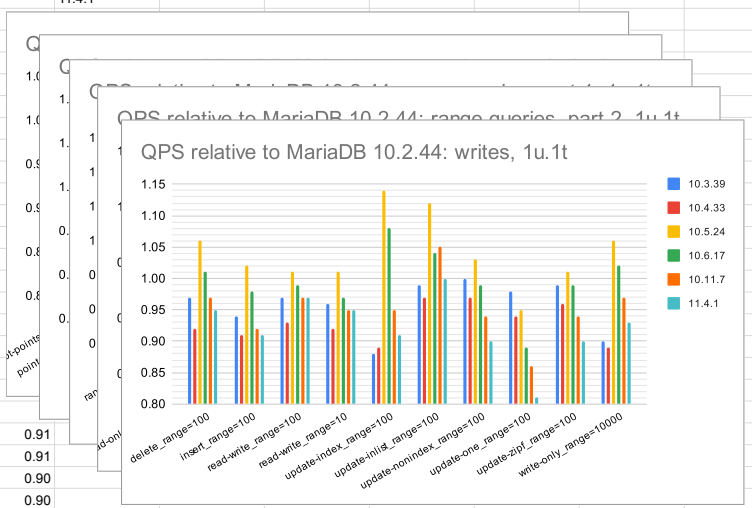
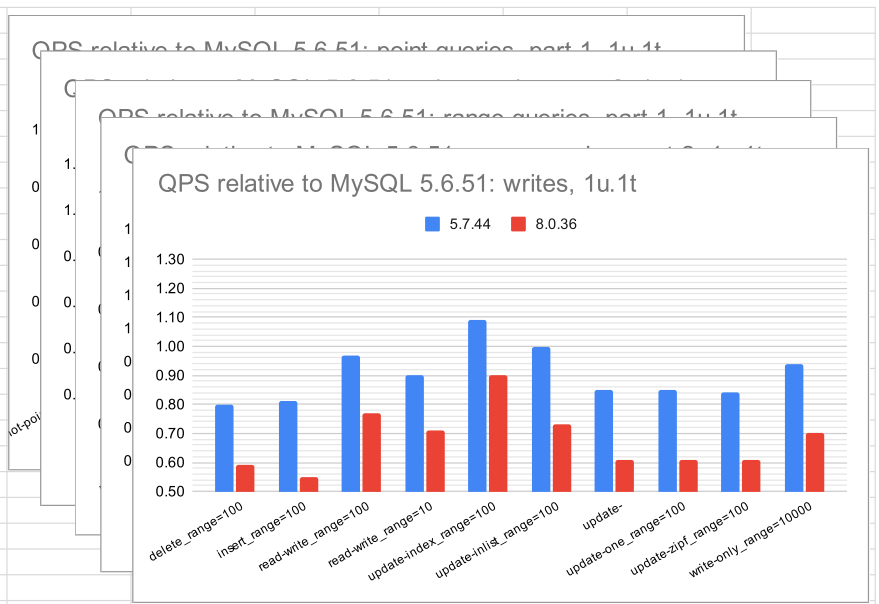


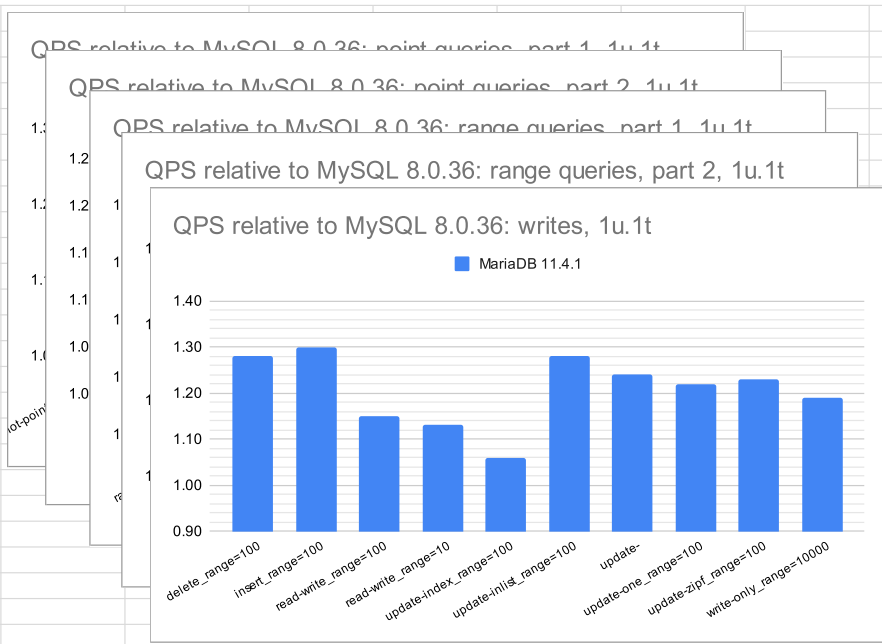
	10.3.39	10.4.33	10.5.24	10.6.17	10.11.7	11.4.1														
hot-points_range	0.96	0.93	0.97	0.98																
point-query.pre_r	0.96	0.91	0.89	0.90																
point-query_rang	0.96	0.91	0.90	0.90																
points-covered-pi	0.98	0.97	0.99	1.01																
points-covered-pi	0.98	0.96	0.98	1.01																
points-covered-si	0.96	0.93	0.95	0.97																
points-covered-si	0.96	0.93	0.96	0.97																
points-notcovere	0.98	0.96	1.00	1.01																
points-notcovere	0.98	0.96	1.00	1.02																
points-notcovere	0.96	0.85	1.01	1.03																
points-notcovere	0.86	0.85	0.97	1.00																
random-points.pr	10.3.39	10.4.33	10.5.24	10.6.17	10.11.7															
random-points.pr	0.98	0.98	1.04	1.04																
random-points.pr	0.98	0.96	1.01	1.01																
random-points.pr	0.98	0.93	0.93	0.93																
random-points_re	0.98	0.97	1.04	1.07																
random-points_re	0.98	0.97	1.00	1.01																
random-points_re	0.98	0.93	0.93	0.94																
range-covered-pl	10.3.39	10.4.33	10.5.24	10.6.17	10.11.7															
range-covered-pl	0.96	0.91	0.94	0.93	0.91															
range-covered-pl	0.95	0.91	0.95	0.93	0.91															
range-covered-si	0.97	0.90	0.93	0.90	0.90															
range-covered-si	0.96	0.90	0.93	0.93	0.90															
range-notcoverec	0.96	0.90	0.94	0.93	0.92	0.94														
range-notcoverec	0.95	0.90	0.94	0.93	0.92	0.94														
range-notcoverec	0.99	0.96	1.01	1.03	1.01	1.03														
range-notcoverec	1.01	0.97	1.01	1.02	1.01	1.03														
scan_range=100	1.02	0.99	1.16	1.14	1.16	1.17														
read-only.pre_rar	10.3.39	10.4.33	10.5.24	10.6.17	10.11.7	11.4.1														
read-only.pre_rar	1.02	1.00	1.03	1.03	1.04	1.04														
read-only.pre_rar	0.97	0.92	0.93	0.93	0.92	0.93														
read-only.pre_rar	0.97	0.91	0.91	0.91	0.89	0.91														
read-only_range:	1.01	0.98	1.02	1.03	1.03	1.02														
read-only_range:	0.98	0.93	0.94	0.94	0.92	0.94														
read-only_range:	0.96	0.91	0.91	0.91	0.89	0.90														
delete_range=10	10.3.39	10.4.33	10.5.24	10.6.17	10.11.7	11.4.1														
delete_range=10	0.97	0.92	1.06	1.01	0.97	0.95														
insert_range=10	0.94	0.91	1.02	0.98	0.92	0.91														
read-write_range	0.97	0.93	1.01	0.99	0.97	0.97														
read-write_range	0.96	0.92	1.01	0.97	0.95	0.95														
update-index_rar	0.88	0.89	1.14	1.08	0.95	0.91														
update-inlist_ran	0.99	0.97	1.12	1.04	1.05	1.00														
update-nonindex	1.00	0.97	1.03	0.99	0.94	0.90														
update-one_rang	0.98	0.94	0.95	0.89	0.86	0.81														
update-zipf_rang	0.99	0.96	1.01	0.99	0.94	0.90														
write-only_range:	0.90	0.89	1.06	1.02	0.97	0.93														
from 11.4.1																				
point, part 1		point, part 2	range, part 1	range, part 2	writes															
average	0.98	0.98	0.98	0.96	0.92															
median	0.99	0.99	0.94	0.94	0.92															
min	0.89	0.93	0.93	0.90	0.81															
max	1.03	1.03	1.17	1.04	1.00															
stddev	0.04	0.04	0.08	0.06	0.05															



	5.7.44	8.0.36			
hot-points_range	0.86	0.66			
point-query.pre_r	0.86	0.68			
point-query_rang	0.86	0.68			
points-covered-p	0.87	0.71			
points-covered-p	0.87	0.70			
points-covered-si	0.90	0.76			
points-covered-si	0.90	0.76			
points-notcovere	0.87	0.72			
points-notcovere	0.88	0.72			
points-notcovere	0.89	0.71			
points-notcovere	0.89	0.70			
	5.7.44	8.0.36			
random-points.pr	1.00	0.83			
random-points.pr	0.87	0.71			
random-points.pr	0.86	0.69			
random-points_ra	1.01	0.84			
random-points_ra	0.88	0.72			
random-points_ra	0.85	0.69			
	5.7.44	8.0.36			
range-covered-pl	0.84	0.69			
range-covered-pl	0.85	0.68			
range-covered-si	0.84	0.69			
range-covered-si	0.84	0.69			
range-notcoverec	0.85	0.67			
range-notcoverec	0.85	0.67			
range-notcoverec	0.87	0.70			
range-notcoverec	0.88	0.71			
scan_range=100	0.87	0.68			
	5.7.44	8.0.36			
read-only.pre_rar	1.27	1.03			
read-only.pre_rar	0.98	0.81			
read-only.pre_rar	0.89	0.73			
read-only_range=	1.27	1.03			
read-only_range=	0.98	0.81			
read-only_range=	0.90	0.73			
	5.7.44	8.0.36			
delete_range=10	0.80	0.59			
insert_range=100	0.81	0.55			
read-write_range	0.97	0.77			
read-write_range	0.90	0.71			
update-index_rar	1.09	0.90			
update-inlist_ran	1.00	0.73			
update-nonindex	0.85	0.61			
update-one_rang	0.85	0.61			
update-zipf_rang	0.84	0.61			
write-only_range=	0.94	0.70			
from 8.0.36					
	point, part 1	point, part 2	range, part 1	range, part 2	writes
average	0.71	0.75	0.69	0.86	0.68
median	0.71	0.72	0.69	0.81	0.66
min	0.66	0.69	0.67	0.73	0.55
max	0.76	0.84	0.71	1.03	0.90
stddev	0.03	0.07	0.01	0.14	0.11

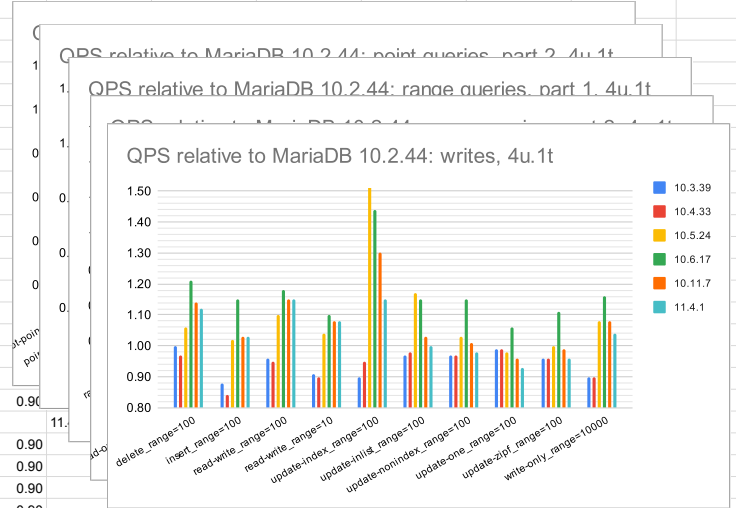


	MariaDB 11.4.1	
hot-points_range	1.28	
point-query.pre_r	1.10	
point-query_rang	1.10	
points-covered-p	1.18	
points-covered-p	1.18	
points-covered-si	1.11	
points-covered-si	1.10	
points-notcovere	1.18	
points-notcovere	1.17	
points-notcovere	1.18	
points-notcovere	1.18	
	MariaDB 11.4.1	
random-points.pr	1.20	
random-points.pr	1.18	
random-points.pr	1.12	
random-points_ra	1.18	
random-points_ra	1.18	
random-points_ra	1.13	
	MariaDB 11.4.1	
range-covered-pl	1.14	
range-covered-pl	1.15	
range-covered-si	1.11	
range-covered-si	1.11	
range-notcoverec	1.20	
range-notcoverec	1.20	
range-notcoverec	1.19	
range-notcoverec	1.18	
scan_range=100	1.37	
	MariaDB 11.4.1	
read-only.pre_rar	1.30	
read-only.pre_rar	1.11	
read-only.pre_rar	1.09	
read-only_range-	1.29	
read-only_range-	1.11	
read-only_range-	1.09	
	MariaDB 11.4.1	
delete_range=10	1.28	
insert_range=100	1.30	
read-write_range	1.15	
read-write_range	1.13	
update-index_rar	1.06	
update-inlist_ran	1.28	
update-nonindex	1.24	
update-one_rang	1.22	
update-zipl_rang	1.23	
write-only_range-	1.19	

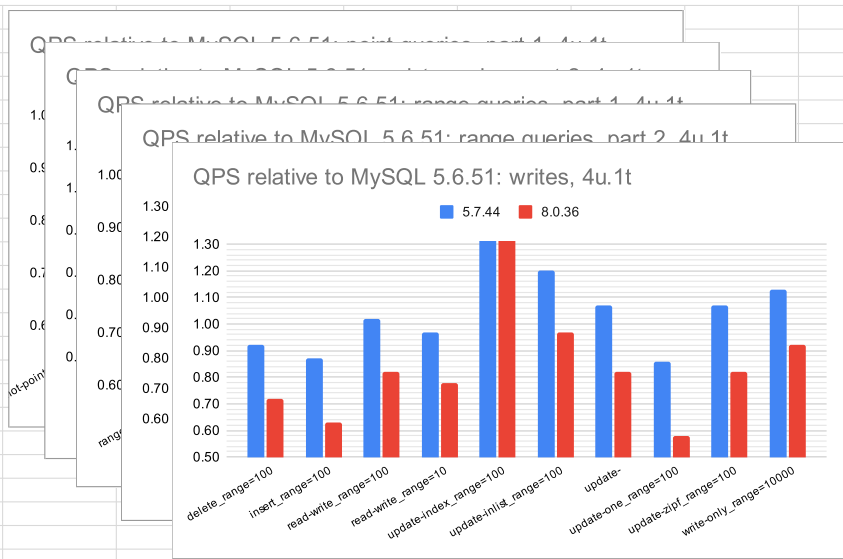


from MariaDB					
	point, part 1	point, part 2	range, part 1	range, part 2	writes
average	1.16	1.17	1.18	1.17	1.21
median	1.18	1.18	1.18	1.11	1.23
min	1.10	1.12	1.11	1.09	1.06
max	1.28	1.20	1.37	1.30	1.30
stddev	0.05	0.03	0.08	0.10	0.08

	10.3.39	10.4.33	10.5.24	10.6.17	10.11.7		
hot-points_range	1.02	0.99	0.98	0.98	0.98		
point-query.pre_r	0.95	0.93	0.91	0.89	0.89		
point-query_rang	0.94	0.93	0.91	0.89	0.89		
points-covered-pi	0.99	0.98	0.98	0.98	0.98		
points-covered-pi	0.99	0.98	0.98	0.99	0.99		
points-covered-si	0.97	0.95	0.95	0.98	0.98		
points-covered-si	0.98	0.96	0.96	0.97	0.97		
points-notcovere	0.99	0.98	0.99	1.00	1.00		
points-notcovere	0.99	0.99	0.99	1.00	1.00		
points-notcovere	0.98	0.97	0.99	1.01	1.01		
points-notcovere	0.99	0.97	0.98	1.00	1.00		
	10.3.39	10.4.33	10.5.24	10.6.17	10.11.7		
random-points.pr	0.99	0.99	1.01	1.02	1.02		
random-points.pr	1.00	0.99	0.99	0.99	0.99		
random-points.pr	0.97	0.94	0.92	0.92	0.92		
random-points_re	0.99	0.98	1.01	1.02	1.02		
random-points_re	0.99	0.98	0.99	0.99	0.99		
random-points_re	0.97	0.94	0.93	0.91	0.91		
	10.3.39	10.4.33	10.5.24	10.6.17	10.11.7		
range-covered-pl	0.97	0.91	0.95	0.93	0.90		
range-covered-pl	0.97	0.91	0.95	0.93	0.90		
range-covered-si	0.97	0.90	0.93	0.93	0.90		
range-covered-si	0.97	0.89	0.93	0.92	0.90		
range-notcoverec	0.96	0.90	0.93	0.92	0.91		0.94
range-notcoverec	0.96	0.90	0.93	0.92	0.91		0.94
range-notcoverec	1.00	0.99	1.01	1.01	0.99		1.00
range-notcoverec	1.00	0.99	1.00	1.01	0.99		1.00
scan_range=100	0.99	0.98	1.15	1.14	1.16		1.16
	10.3.39	10.4.33	10.5.24	10.6.17	10.11.7	11.4.1	
read-only.pre_rar	1.03	1.00	1.04	1.03	1.03	1.03	1.03
read-only.pre_rar	0.96	0.93	0.93	0.92	0.92	0.93	0.93
read-only.pre_rar	0.95	0.93	0.91	0.90	0.89	0.91	0.91
read-only_range:	1.03	1.00	1.03	1.02	1.02	1.03	1.03
read-only_range:	0.96	0.94	0.94	0.93	0.92	0.93	0.93
read-only_range:	0.95	0.93	0.91	0.90	0.89	0.91	0.91
	10.3.39	10.4.33	10.5.24	10.6.17	10.11.7	11.4.1	
delete_range=10	1.00	0.97	1.06	1.21	1.14	1.12	
insert_range=10	0.88	0.84	1.02	1.15	1.03	1.03	1.03
read-write_range	0.96	0.95	1.10	1.18	1.15	1.15	1.15
read-write_range	0.91	0.90	1.04	1.10	1.08	1.08	1.08
update-index_rar	0.90	0.95	3.32	1.44	1.30	1.15	1.15
update-inlist_ran	0.97	0.98	1.17	1.15	1.03	1.00	1.00
update-nonindex	0.97	0.97	1.03	1.15	1.01	0.98	0.98
update-one_rang	0.99	0.99	0.98	1.06	0.96	0.93	0.93
update-zipf_rang	0.96	0.96	1.00	1.11	0.99	0.96	0.96
write-only_range:	0.90	0.90	1.08	1.16	1.08	1.04	1.04
from 11.4.1							
	point, part 1	point, part 2	range, part 1	range, part 2	writes		
average	0.96	0.97	0.97	0.96	1.04		
median	0.97	0.99	0.94	0.93	1.04		
min	0.91	0.92	0.93	0.91	0.93		
max	0.99	1.01	1.16	1.03	1.15		
stddev	0.03	0.04	0.08	0.06	0.08		



	5.7.44	8.0.36			
hot-points_range	0.90	0.68			
point-query_pre_r	0.82	0.67			
point-query_range	0.83	0.68			
points-covered-p	0.90	0.71			
points-covered-p	0.90	0.72			
points-covered-si	0.92	0.76			
points-covered-si	0.92	0.77			
points-notcovere	0.92	0.71			
points-notcovere	0.92	0.72			
points-notcovere	0.92	0.73			
points-notcovere	0.92	0.73			
	5.7.44	8.0.36			
random-points.pr	1.08	0.84			
random-points.pr	0.91	0.71			
random-points.pr	0.87	0.69			
random-points_r	1.07	0.84			
random-points_r	0.91	0.72			
random-points_r	0.87	0.69			
	5.7.44	8.0.36			
range-covered-pl	0.84	0.68			
range-covered-pl	0.84	0.68			
range-covered-si	0.83	0.68			
range-covered-si	0.84	0.68			
range-notcovere	0.85	0.67			
range-notcovere	0.85	0.67			
range-notcovere	0.88	0.69			
range-notcovere	0.89	0.69			
scan_range=100	0.89	0.69			
	5.7.44	8.0.36			
read-only.pre_ra	1.27	1.04			
read-only.pre_ra	0.98	0.82			
read-only.pre_ra	0.90	0.74			
read-only_range:	1.27	1.04			
read-only_range:	0.99	0.82			
read-only_range:	0.90	0.74			
	5.7.44	8.0.36			
delete_range=10	0.92	0.72			
insert_range=10	0.87	0.63			
read-write_range	1.02	0.82			
read-write_range	0.97	0.78			
update-index_rar	2.49	3.59			
update-inlist_ran	1.20	0.97			
update-nonindex	1.07	0.82			
update-one_rang	0.86	0.58			
update-zipf_rang	1.07	0.82			
write-only_range:	1.13	0.92			
from 8.0.36					
	point, part 1	point, part 2	range, part 1	range, part 2	writes
average	0.72	0.75	0.68	0.87	1.07
median	0.72	0.72	0.68	0.82	0.82
min	0.67	0.69	0.67	0.74	0.58
max	0.77	0.84	0.69	1.04	3.59
stddev	0.03	0.07	0.01	0.14	0.90



	MariaDB 11.4.1	
hot-points_range	1.23	
point-query.pre_r	1.12	
point-query_rang	1.14	
points-covered-p	1.17	
points-covered-p	1.17	
points-covered-si	1.06	
points-covered-si	1.07	
points-notcovere	1.20	
points-notcovere	1.19	
points-notcovere	1.13	
points-notcovere	1.15	
	MariaDB 11.4.1	
random-points.pr	1.23	
random-points.pr	1.20	
random-points.pr	1.13	
random-points_ra	1.22	
random-points_ra	1.19	
random-points_ra	1.13	
	MariaDB 11.4.1	
range-covered-pl	1.15	
range-covered-pl	1.15	
range-covered-si	1.11	
range-covered-si	1.11	
range-notcoverec	1.20	
range-notcoverec	1.20	
range-notcoverec	1.18	
range-notcoverec	1.18	
scan_range=100	1.37	
	MariaDB 11.4.1	
read-only.pre_rar	1.30	
read-only.pre_rar	1.13	
read-only.pre_rar	1.12	
read-only_range=	1.29	
read-only_range=	1.13	
read-only_range=	1.12	
	MariaDB 11.4.1	
delete_range=10	1.36	
insert_range=10	1.25	
read-write_range	1.17	
read-write_range	1.15	
update-index_rar	0.35	
update-inlist_ran	1.11	
update-nonindex	1.18	
update-one_rang	1.60	
update-zipf_rang	1.18	
write-only_range=	1.11	

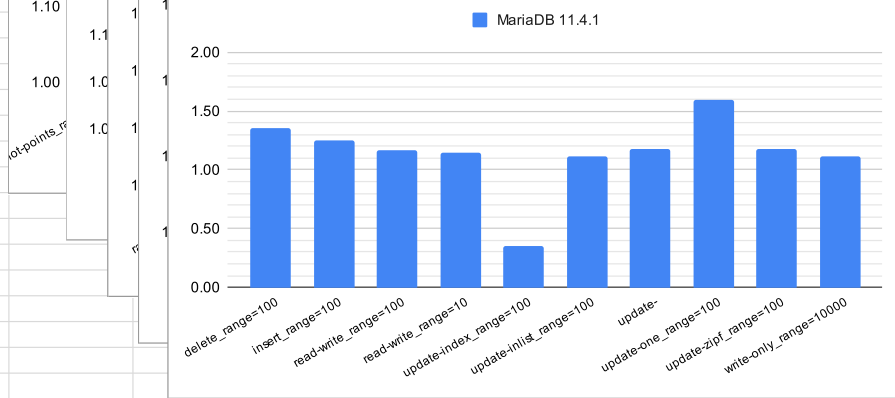
QPS relative to MySQL 8.0.36: point queries. part 1. 4u.1t

QPS relative to MySQL 8.0.36: point queries, part 2, 4u.1t

QPS relative to MySQL 8.0.36: range queries. part 1. 4u.1t

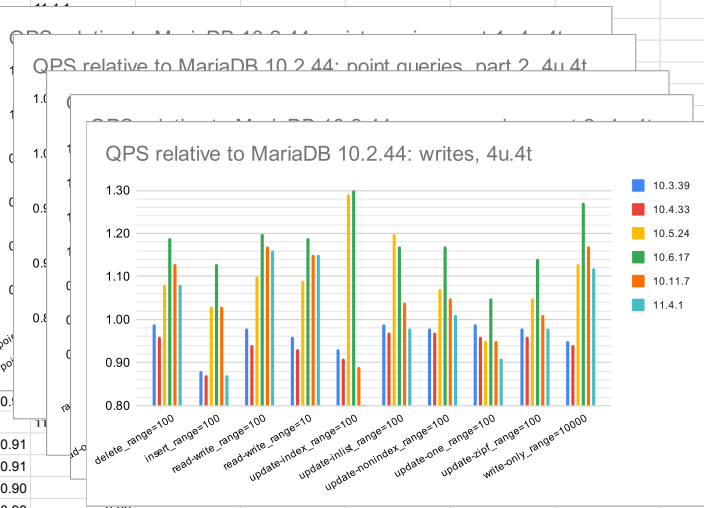
QPS relative to MySQL 8.0.36: range queries, part 2, 4u.1t

QPS relative to MySQL 8.0.36: writes, 4u.1t

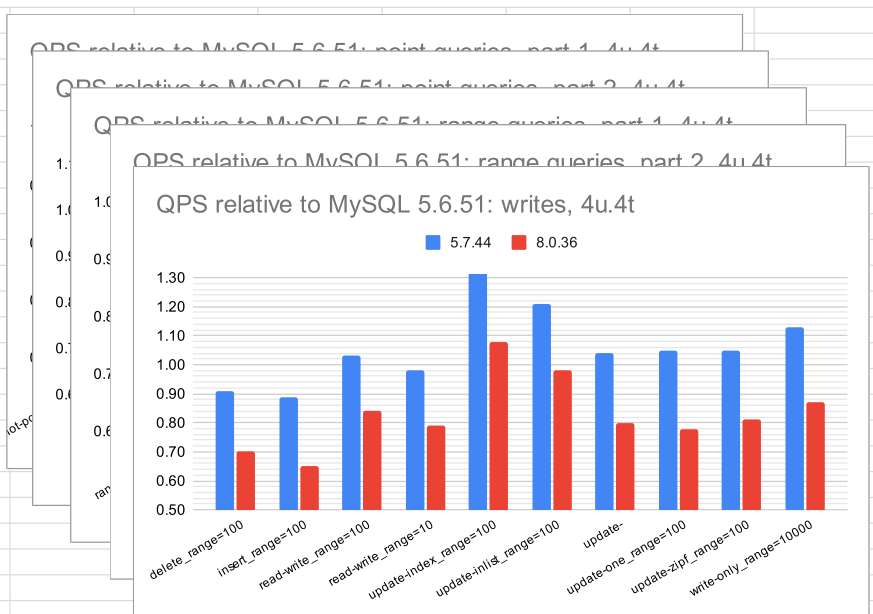


	point, part 1	point, part 2	range, part 1	range, part 2	writes
average	1.15	1.18	1.18	1.18	1.15
median	1.15	1.20	1.18	1.13	1.18
min	1.06	1.13	1.11	1.12	0.35
max	1.23	1.23	1.37	1.30	1.60
stddev	0.05	0.04	0.08	0.09	0.32

	10.3.39	10.4.33	10.5.24	10.6.17	10.11.7	11.4.1
hot-points_range	0.96	0.94	0.95	0.96	0.96	
point-query_pre_r	0.95	0.92	0.91	0.91	0.90	
point-query_range	0.95	0.91	0.91	0.91	0.90	
points-covered-pi	0.98	0.96	0.98	0.98	0.98	
points-covered-pj	0.98	0.97	0.98	0.98	0.98	
points-covered-si	0.96	0.94	0.96	0.96	0.98	
points-covered-sj	0.96	0.94	0.96	0.96	0.97	
points-notcovered	0.98	0.97	0.99	0.99	0.99	
points-notcoveredi	0.98	0.96	0.99	0.99	0.99	
points-notcoveredj	0.98	0.97	1.01	1.01	1.01	
points-notcoveredk	0.98	0.97	1.00	1.00	1.00	
random-points_pr	0.98	0.97	0.99	0.99	1.00	
random-points_pr	0.99	0.97	0.99	0.99	0.99	
random-points_pr	0.98	0.92	0.92	0.92	0.92	
random-points_r	0.98	0.97	1.00	1.01	1.01	
random-points_r	0.99	0.97	1.00	0.99	0.99	
random-points_r	0.97	0.92	0.92	0.92	0.92	
range-covered-pl	0.97	0.90	0.93	0.93	0.93	0.91
range-covered-pl	0.97	0.90	0.93	0.93	0.93	0.91
range-covered-si	0.97	0.89	0.91	0.92	0.90	0.90
range-covered-si	0.97	0.89	0.90	0.91	0.90	0.90
range-notcovered	0.96	0.89	0.92	0.92	0.91	0.92
range-notcovered	0.96	0.89	0.92	0.92	0.91	0.92
range-notcovered	0.99	0.98	1.00	1.01	0.99	0.99
range-notcovered	0.99	0.98	1.00	1.01	0.99	1.00
scan_range=100	1.00	0.99	1.17	1.13	1.15	1.14
read-only_pre_rar	1.01	0.99	1.00	1.03	1.02	1.00
read-only_pre_rar	0.97	0.92	0.93	0.93	0.91	0.92
read-only_pre_rar	0.96	0.92	0.91	0.91	0.89	0.90
read-only_range=	1.00	0.99	1.02	1.02	1.01	1.00
read-only_range=	0.97	0.92	0.93	0.93	0.91	0.92
read-only_range=	0.96	0.91	0.91	0.90	0.89	0.90
delete_range=10	0.99	0.96	1.08	1.19	1.13	1.08
insert_range=10	0.88	0.87	1.03	1.13	1.03	0.87
read-write_range	0.98	0.94	1.10	1.20	1.17	1.16
read-write_range	0.96	0.93	1.09	1.19	1.15	1.15
update-index_rar	0.93	0.91	1.29	1.30	0.89	0.77
update-inlist_ran	0.99	0.97	1.20	1.17	1.04	0.98
update-nonindex	0.98	0.97	1.07	1.17	1.05	1.01
update-one_rang	0.99	0.96	0.95	1.05	0.95	0.91
update-zipf_rang	0.98	0.96	1.05	1.14	1.01	0.98
write-only_range=	0.95	0.94	1.13	1.27	1.17	1.12
from 11.4.1						
point, part 1		point, part 2	range, part 1	range, part 2	writes	
average	0.97	0.96	0.96	0.94	1.00	
median	0.97	0.99	0.92	0.92	1.00	
min	0.91	0.91	0.90	0.90	0.77	
max	1.00	0.99	1.14	1.00	1.16	
stddev	0.03	0.04	0.08	0.05	0.13	



	5.7.44	8.0.36			
hot-points_range	0.89	0.68			
point-query.pre_r	0.84	0.69			
point-query_rang	0.84	0.69			
points-covered-p	0.89	0.71			
points-covered-p	0.89	0.71			
points-covered-si	0.91	0.77			
points-covered-si	0.91	0.78			
points-notcovere	0.91	0.72			
points-notcovere	0.90	0.72			
points-notcovere	0.92	0.73			
points-notcovere	0.91	0.74			
	5.7.44	8.0.36			
random-points.pr	1.06	0.84			
random-points.pr	0.90	0.72			
random-points.pr	0.88	0.70			
random-points_ra	1.06	0.85			
random-points_ra	0.91	0.72			
random-points_ra	0.88	0.70			
	5.7.44	8.0.36			
range-covered-pl	0.84	0.68			
range-covered-pl	0.84	0.68			
range-covered-si	0.83	0.69			
range-covered-si	0.84	0.70			
range-notcoverec	0.85	0.67			
range-notcoverec	0.85	0.67			
range-notcoverec	0.89	0.69			
range-notcoverec	0.89	0.69			
range-notcoverec	0.89	0.69			
scan_range=100	0.88	0.69			
	5.7.44	8.0.36			
read-only.pre_rar	1.26	1.04			
read-only.pre_rar	0.99	0.84			
read-only.pre_rar	0.92	0.76			
read-only_range=	1.25	1.04			
read-only_range=	1.00	0.84			
read-only_range=	0.92	0.76			
	5.7.44	8.0.36			
delete_range=10	0.91	0.70			
insert_range=100	0.89	0.65			
read-write_range	1.03	0.84			
read-write_range	0.98	0.79			
update-index_rar	1.45	1.08			
update-inlist_ran	1.21	0.98			
update-nonindex	1.04	0.80			
update-one_rang	1.05	0.78			
update-zipf_rang	1.05	0.81			
write-only_range=	1.13	0.87			
from 8.0.36					
	point, part 1	point, part 2	range, part 1	range, part 2	writes
average	0.72	0.76	0.68	0.88	0.83
median	0.72	0.72	0.69	0.84	0.81
min	0.68	0.70	0.67	0.76	0.65
max	0.78	0.85	0.70	1.04	1.08
stddev	0.03	0.07	0.01	0.13	0.13



	MariaDB 11.4.1	
hot-points_range	1.27	
point-query.pre_r	1.08	
point-query_rang	1.09	
points-covered-p	1.18	
points-covered-p	1.17	
points-covered-si	1.08	
points-covered-si	1.08	
points-notcovere	1.18	
points-notcovere	1.18	
points-notcovere	1.15	
points-notcovere	1.15	
	MariaDB 11.4.1	
random-points.pr	1.20	
random-points.pr	1.19	
random-points.pr	1.11	
random-points_ra	1.20	
random-points_ra	1.18	
random-points_ra	1.11	
	MariaDB 11.4.1	
range-covered-pl	1.15	
range-covered-pl	1.14	
range-covered-si	1.07	
range-covered-si	1.07	
range-notcoverec	1.18	
range-notcoverec	1.18	
range-notcoverec	1.17	
range-notcoverec	1.17	
scan_range=100	1.33	
	MariaDB 11.4.1	
read-only.pre_rar	1.27	
read-only.pre_rar	1.10	
read-only.pre_rar	1.09	
read-only_range-	1.27	
read-only_range-	1.11	
read-only_range-	1.09	
	MariaDB 11.4.1	
delete_range=10	1.31	
insert_range=100	1.05	
read-write_range	1.16	
read-write_range	1.14	
update-index_rar	0.92	
update-inlist_ran	1.07	
update-nonindex	1.16	
update-one_rang	1.26	
update-zipl_rang	1.15	
write-only_rang	1.20	

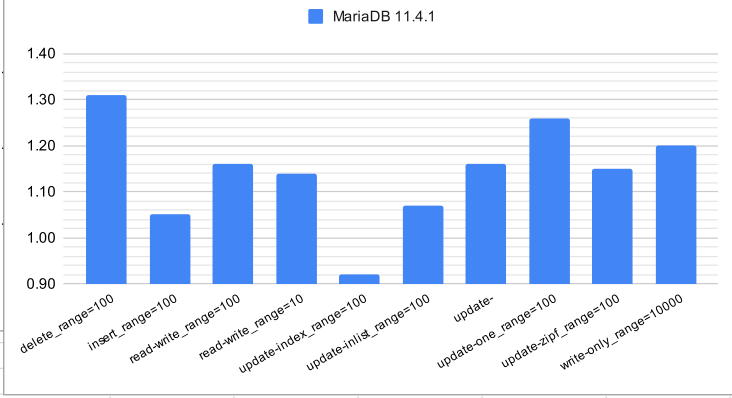
QPS relative to MySQL 8.0.36: point queries, part 1, 4u,4t

QPS relative to MySQL 8.0.36: point queries, part 2, 4u,4t

QPS relative to MySQL 8.0.36: range queries, part 1, 4u,4t

QPS relative to MySQL 8.0.36: range queries, part 2, 4u,4t

QPS relative to MySQL 8.0.36: writes, 4u,4t



from MariaDB					
	point, part 1	point, part 2	range, part 1	range, part 2	writes
average	1.15	1.17	1.16	1.16	1.14
median	1.15	1.19	1.17	1.11	1.16
min	1.08	1.11	1.07	1.09	0.92
max	1.27	1.20	1.33	1.27	1.31
stddev	0.06	0.04	0.08	0.09	0.11