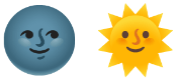


JSONBench — a Benchmark For Data Analytics On JSON



[Methodology](#) | [Reproduce and Validate the Results](#) | [Add a System](#) | [Report Mistake](#) | See also: [ClickBench](#)

System:	All	ClickHouse	Apache Doris	DuckDB	Elasticsearch (no source)	Elasticsearch	GreptimeDB	MongoDB	PostgreSQL	SingleStore	Starrocks	VictoriaLogs
Scale:	1 million	10 million	100 million	1000 million								
Metric:	Cold Run	Hot Run	Storage Size	Data Quality								
Flattening:	No	Yes										

System	Relative time (lower is better).
Different colors on the bar chart represent the same values shown at different scales (1x, 10x, 100x zoom)	
ClickHouse:	×1.08
Starrocks:	×1.85
Apache Doris:	×2.32
Elasticsearch:	×14.63
SingleStore:	×84.99
MongoDB:	×1218.81
DuckDB:	×4779.96
PostgreSQL:	×5691.31

Detailed Comparison

☒		ClickHouse	Starrocks	Apache Doris	Elasticsearch	S
	Data size:	92.72 GiB (×1.00)	179.73 GiB (×1.94)	199.88 GiB (×2.16)	359.58 GiB (×3.88)	218.7
	Data quality:	999999258	997999662	999999994	999999101	
☒	Q1.	0.225s (×1.00)	0.510s (×2.21)	1.630s (×6.98)	3.884s (×16.57)	43.9
☒	Q2.	3.236s (×1.00)	7.180s (×2.22)	6.610s (×2.04)	28.548s (×8.80)	196
☒	Q3.	2.136s (×1.47)	1.450s (×1.00)	1.780s (×1.23)	23.570s (×16.15)	111
☒	Q4.	0.479s (×1.00)	1.010s (×2.09)	0.930s (×1.92)	8.080s (×16.54)	32
☒	Q5.	0.514s (×1.00)	1.100s (×2.12)	1.030s (×1.98)	8.994s (×17.18)	40