maxRAID: Revolutionizing Database Storage

Efficient. Fast. Long-lasting Storage for Modern Databases.

This evaluation compares a **200TB** database storage system using 30.72TB drives, assessing maxRAID against RAID-10 and RAID-5 solutions, including MD RAID, Xinnor, and GRAID. RAID-10 requires 14 drives, while RAID-5 needs 8. With maxRAID's advanced compression—achieving 50% in typical database environments—you get the same capacity using just 6 drives, including parity. maxRAID increases storage efficiency, reduces wear, and ensures consistent, high performance.

	RAID-10	RAID-5	maxRAID-5
Performance	Good	Poor	Good
Drives (30.72TB)	14	8	6
Drive Cost[1]	$62,986	$35,592	$26,694

Day-1 Savings
$8,898
vs. RAID-5

Over five years, SSD replacement costs in traditional RAID setups grow significantly due to drive wear. maxRAID dramatically extends SSD life, leading to substantial long-term savings.

Save over
$70,000
in 5 years with
maxRAID

RAID-10	RAID-5	maxRAID-5	
3 years	1.75 years	**8 years**	SSD Life
$62,986	$71,984	**$0**	5-year SSD Repl. Cost[1]

Fewer drives, more capacity.

Reduced Day-1 and long-term costs.

Extend SSD lifespan with peak performance

How does **maxRAID** work

maxRAID revolutionizes storage with advanced Host FTL architecture. It optimizes data flow, converting random writes into efficient, sequential patterns, compressing data in real-time, and reducing SSD wear. The result? Lower latency, more usable capacity, and sustained performance that outlasts traditional RAID systems.

1: Based on Kioxia 1 DWPD 30TB SSD at $4,449. Drive costs only; excludes host system and software licenses.

maxRAID delivers lower costs, sustained performance, and longer-lasting storage