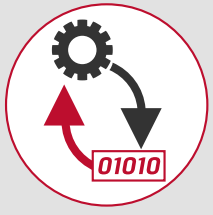# SOLID STATE DRIVES

THE BEST FIT FOR SOFTWARE-DEFINED STORAGE

Software-Defined Storage (SDS) is an emerging approach to data storage that resolves a growing but fundamental issue:
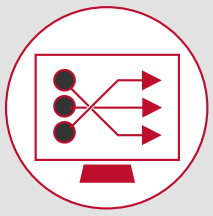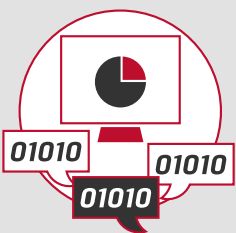**How to store and retrieve massive amounts of data?**

NETWORKING **APPROACH**

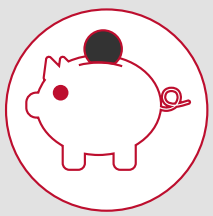### BEFORE SDS

- Co-mingled control and data planes
- Complex virtual environments
- Difficult-to-manage abstraction and virtualisation
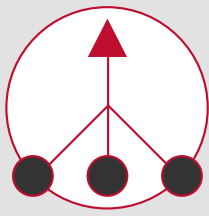- Data stored in siloed servers
- Significant server array investment

AFTER SDS

- Abstract data from hardware
- Integrated storage, compute and networking
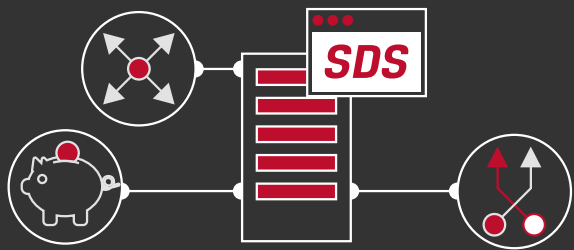- Software-orchestrated data storage and retrieval
- Standard interfaces
- Virtualised data-path

IN SUMMARY

SDS separates storage software and software services from underlying hardware to yield cost benefits, flexibility and scalability.
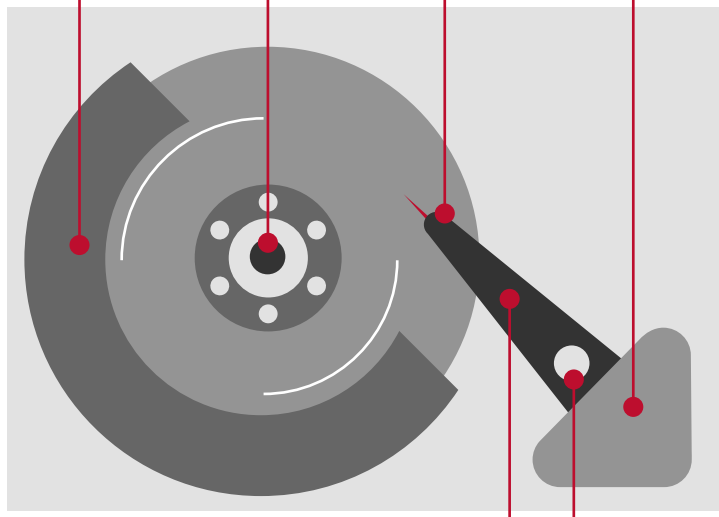
SDS BENEFITS RELY ON
SMART HARDWARE DECISIONS

SDS reduces the need for—and cost of—future hardware purchases and that's a big deal. But hardware quality matters.
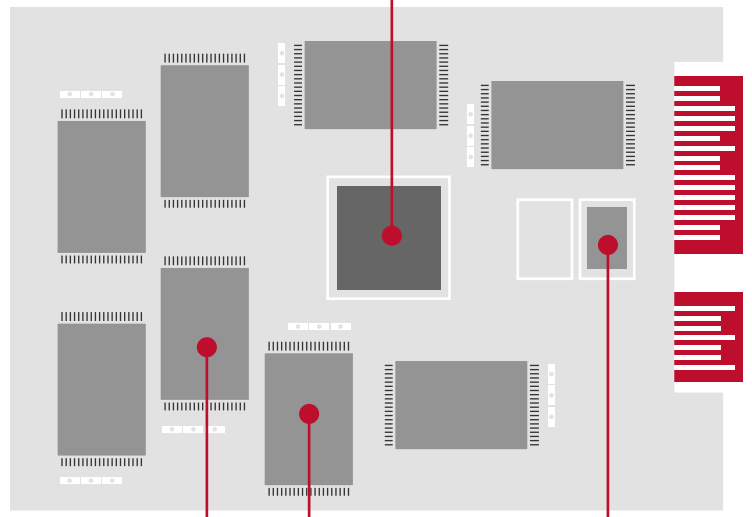**That's where SSDs pull far ahead of HDDs.**

HARD DISK DRIVES

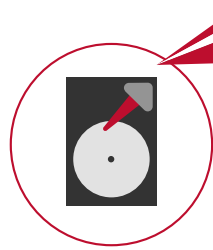Platters Spindle RW head Actuator

Actuator arm   Actuator axis
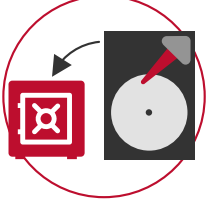
SOLID STATE DRIVES

Controller

NAND flash memory   Cache

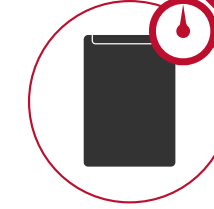| HARD DISK DRIVES	SOLID STATE DRIVES
Shock-resistant up to 50g/2ms	Shock-resistant up to 1500g/0.5ms
Slow mechanical procedure	100x faster than HDDs
Well-suited for data-archival	Well-suited for critical, often-accessed data

Accelerate your organisation with Kingston SSDs

Learn more about why the future of business depends on SSD-enabled SDS.

Download the White Paper

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