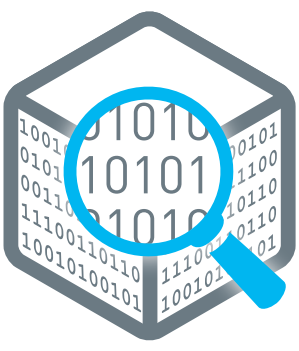
Variable Block Deduplication

VS

Fixed Block Deduplication

up to 6X MORE EFFICIENT



Finds More redundancy in the data

IMPROVED DATA REDUCTION

REQUIRES

you to use **up to 6 times** the storage

CONSUMES

up to 6 times the network bandwidth for replication

DEMANDS

MORE cooling, **MORE** rack space and **MORE** power

Here's how it works:

Take a phrase, break it into blocks...

N	O	W		I	S		T	H	E		T	I	M	E

Variable block size →

N	O	W	
I	S		
T	H	E	
T	I	M	E

← **Fixed** block size

N	O	W	
I	S		T
H	E		T
I	M	E	

Now add one character...

S	N	O	W		I	S		T	H	E		T	I	M	E

ONLY ONE block changes →

S	N	O	W	
I	S			
T	H	E		
T	I	M	E	

S	N	O	W	←
	I	S		←
T	H	E		←
T	I	M	E	←

EVERY BLOCK changes

Variable-block algorithms divide data into blocks based on the characteristics of the data itself, not an arbitrary block size. **This makes them flexible when data changes.** Only the new or changed data is stored and **the uniqueness of the remainder of the file is not impacted.**

Business Benefits:

Deduplication enables new options for data protection, and makes previously expensive options viable.

Over time, infrastructure costs will dwarf the acquisition cost of a solution, so it pays to pay attention to them.

The greater the retention requirement for the data, the greater the benefits realized by variable-block deduplication.

Learn more about variable-block vs fixed-block deduplication in a side-by-side technical comparison

Visit: **quantum.com/dedupe**

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