

## Data storage is getting thinner – literally



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Enterprise computing tends to be immune to the trend of miniaturization (unless we are talking about CPU dies). However two new devices have hit the market, that are set to make enterprise data storage thinner.

### **Western Digital and the ultra-slim Ultrastar**

While Seagate and Toshiba have been stealing headlines for their new [helium-filled drives](#) that take capacities to a new high, Western Digital has been hard at work making drives smaller. That may sound counter-intuitive, but the hard disk giant has found a way to squeeze more data onto each disk platter.

As a result, the new Ultrastar models require fewer platters, allowing Western Digital to reduce the physical size of each hard drive.

With smaller units and fewer platters, the Ultrastar 7K6 should reduce power consumption and help CTOs squeeze more capacity into their data centers. The only problem is that these space savings will not be realized until manufacturers shrink drive bays and chassis to match the new form factor.

## Ruler format SSDs from Intel and Samsung

On the flash front, Intel and Samsung have introduced a new “ruler format” – so called because they are long and thin like a ruler. The elongated shape allows for more drives to be squeezed into a standard 2U rackmount enclosure – up to 36 of the Samsung unit.

Again, this development will help CTOs squeeze more capacity into their data centers, overcoming one of the biggest challenges of the Big Data age – physical data center space. But as with the new Ultrastar drives, ruler drives require special chassis – and it may be some time until we see them become mainstream.

Indeed, the additional cost of ruler drives may mean that the format never achieves mass adoption.

## Good news for the CTO

The fact that Western Digital, Intel and Samsung are all working hard to reduce the physical size of drives is great news. It shows that manufacturers are aware of the challenges of physical data center space, and are taking steps to help CTOs win the battle.

Which means that there is still a future for the onsite data center.

In the meantime, [contact CDS](#) to discuss your current hard disk drive arrays and how we can help you extract more value from them.