

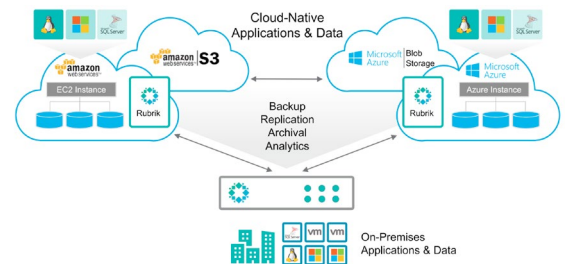


HYPERCONVERGED DATA PROTECTION

What is Hyperconverged Data Protection?

Hyperconverged technologies are solutions which collapse a number of disparate but complementary technologies together into a turnkey solution, often delivered as a single appliance.

Such solutions take elements of compute, storage, networking and backup to deliver a single appliance-based solution to support a virtualised workload. This removes the need for enterprise IT departments to consider multiple, separate technology elements.



The Backup & Data Protection Challenge

Before virtualisation, the traditional approaches to backup and data protection were built around the physical world. These focused on providing off-machine copies of data, by way of a point-in-time copy or backup of data, which could be restored to production use in the event of data loss from the primary source. Backups were initially written to tape devices, but as technology continued to evolve, and costs of different elements decreased, backup solutions developed to support faster and more flexible recovery operations.

Tape densities have increased and the cost of capacity disk storage has reduced in real terms. However, apart from the development of deduplication technology for backup data during the mid 2000s, one can argue that there has been no significant innovation in the market for 20 years.

As we move into the ‘virtualised’ world, we see backup and data protection solutions follow the same general architecture as before. This has produced a sprawl of components: multiple backup servers, multiple proxy servers, multiple media servers, multiple tape drive devices, multiple tape carousels/loaders and such like. We also see new backup software products, which look to embrace the use of virtualised environments. However, even with these technologies, organisations have still ended up with a very complex backup solution utilising multiple elements, and requiring significant resource (people, time and cost) to properly manage.

As data volumes continue to grow, so does the need to protect this data and address the business requirements for more immediate data access and recovery options. IT departments need to look at how they can add value rather than just looking at the cost base for their organisation.

How do IT departments provide increasing levels of data protection, while also managing to reduce cost and complexity?

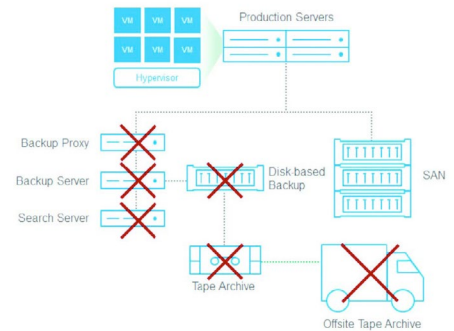
Hyperconverged Data Protection - what a solution needs to look like

Hyperconverged Data Protection solutions provide compute, storage, networking and backup capability, delivered as a single appliance to support the backup and data protection needs of a virtualised estate. Such solutions remove the need for IT departments to consider multiple, separate technology elements, thereby ripping out whole swathes of infrastructure and management cost.

Hardware should comprise of industry-standard components, such as Intel x86 based CPUs, industry-standard disk drives and motherboards, and should not be constrained by custom-built components or specialist hardware add-ons.

A Hyperconverged Data Protection solution should enable you to remove instances of:

- Backup Servers
- Backup proxy servers
- Backup search servers
- Disk based backup platforms
- Tape backup devices
- Offline tape archives
- Backup software
- Backup software agents



Rubrik

Rubrik simplifies data backup and recovery for virtualised environments. It eliminates backup software by integrating data orchestration, catalogue management and de-duplicated storage into a single, scale-out fabric. Rubrik scales linearly without being hampered by forklift upgrades. Deduplication, compression, and other data services scale in-line with the cluster to maximise efficiency and savings. Instant recovery is delivered without data rehydration or additional storage provisioning. With Rubrik, lengthy backup setup times, broken job scheduling, and uncertain recoveries are relics of the past.

- Rubrik is easy to set up with automated discovery of the complete infrastructure.
- Rubrik is simple to scale growing in small 2U increments to suit data growth.
- Rubrik protects data and can easily utilise cloud based storage (AWS and other S3 end points) for longer term archive and data retention needs.

