

Nominee: Bridgeworks

Nomination title: Data Acceleration Excels Beyond WAN

Optimisation

Bridgeworks is one of analyst firm Gartner's 'Cool Network Vendors' for 2016 because its technology "improves data transfer times, and it is particularly effective for large transfers of data, to and from Amazon Web Services (AWS)."

It's cool because Bridgeworks' technology is a game-changer for any enterprise that needs to move large volumes of data at speed and has a problem with mitigating the effects of network latency. Bridgeworks PORTrockIT is the next generation of WAN transfer technology, using AI (machine intelligence) to optimise and maximise performance of existing infrastructure. It assists customers running IBM Spectrum Protect, solving latency and packet loss problems by significantly mitigating the effects of both latency and packet loss on WAN backup, replication and recovery jobs.

Leading performance

"With a sub 30 minute installation of PORTrockIT, we were able to run a number of rigorous performance tests for IBM Spectrum Protect Customers. Even in the most challenging scenario we tested, with 360ms of latency and 1% packet loss, PORTrockIT was able to complete data transfers 210 times faster than a traditional WAN optimisation approach", says David Trossell – CEO and CTO of Bridgeworks.

He adds: "The combination of IBM Spectrum Protect and PORTrockIT is an example of technologies working smarter together, resulting in cost and time optimization at multiple levels for our customers. For a business, recovery time and recovery point objectives are improved dramatically, keeping systems and data protected and available when the business needs it."

Mitigating data latency

Tests with Bridgeworks PORTrockIT have also shown data and information management solutions company Commvault that it is possible today to accelerate data while mitigating data latency and reducing packet loss when data is transmitted across a wide area network (WAN). For back-ups

that take place on a local area network (LAN), Commvault's technology is generally all an organisation needs to ensure fast and reliable service. However, whenever the same data is sent across a WAN some additional bottlenecks often occur and these reduce back-up and restore performance. Yet Commvault found during its assessment that PORTrockIT can accelerate data transfer rates by a factor of more than 640x across wide area networks (WANs).

Faced with a wide range of possible disaster scenarios – from the accidental deletion of a file, through the failure of a server, to the complete loss of a whole data centre – organisations seek to optimise their recovery time and recovery point objectives in order to maximise availability and minimise data loss. Therefore the desire to protect larger quantities of data through more frequent back-ups has led vendors such as Commvault to rethink the way data protection works.

The problem is that as data volumes increase, it becomes impractical to perform full back-ups regularly – so Commvault has developed compression technologies to reduce the total amount of data that needs to be copied, and deduplication technologies to only copy data that has been created or updated since the previous back-up. Unfortunately, these techniques have a significant impact on the speed and cost of back-up and restore processes – minimising the total amount of back-up data that needs to be stored, and reducing the amount of network bandwidth required to complete the back-ups within a viable time-window.

Beyond WAN optimisation

WAN performance issues can't be resolved by increasing the networks bandwidth. Even when moving relatively small amounts of compressed or deduplicated data over a very high bandwidth connection, transfer rates can still be extremely slow – hindering the organisation's ability to protect its data.

In practical terms, PORTrockIT is installed as a pair of appliances or Virtual Instances, deployed at either end of the WAN. A source server, running a Commvault Virtual Server Agent, simply passes data to the PORTrockIT appliance on the near side of the WAN, which manages the virtual connections to the second PORTrockIT appliance on the far side of the WAN. Once the second PORTrockIT appliance begins receiving packets, it routes them seamlessly to the Commvault MediaAgent, which manages the target storage media. The effect is simply much faster network transfer performance, without any need to make any changes to the rest of the network architecture.



The combination of Commvault and PORTrockIT is an example of technologies working smarter, not harder. The volume of data that organisations need to manage and protect is increasing year-on-year, at a rate that would have seemed incredible ten years ago. So organisations need to adopt back-up technologies to gain greater value from their existing infrastructure by reducing the amount of data that needs to be copied and stored, while efficiently accelerating it across the network faster.

Data resilience and security

Bridgeworks PORTrockIT software is also available for WANdisco Fusion's patented active-transactional replication technology, that was built to move transactional data to the cloud, at petabyte scale, without downtime or data loss. PORTrockIT's patented technology supports businesses that rely on fast movement of large volumes of data and increases performance by up to 100 times faster. This addition of speed delivers enterprise data resilience and security for critical enterprise applications such as backup, replication, disaster recovery and cloud migration.

"This new partnership brings together two best-of-breed solutions to unlock the full potential of the cloud," says David Richards, WANdisco CEO and Co-Founder. He adds: "WANdisco's continuous availability and guaranteed data consistency can now be deployed with software from Bridgeworks that virtually removes the effects of network latency, making it possible for on-premise and cloud environments to operate as one."

"WANdisco software is already known for its performance and it has revolutionized the global enterprise requirement to migrate large amounts of transactional data to the Cloud. When combined with Bridgeworks PORTrockIT technology, the resulting increase of up to 100 times in transfer speed has raised the bar for business", explains Trossell.

Bridgeworks solutions such as PORTrockIT and WANrockIT offer the chance for companies to achieve data acceleration leadership. Bridgeworks therefore deserves to win the Communications and Networking Vendor category of the DCS Awards because it is a leader in its field; no other technology firm is providing such effective solutions as theirs.

Why nominee should win

- Bridgeworks is a leader in data acceleration, enabling large volumes of data to be moved up to 100 times faster than WAN optimisation solutions achieve.



- Clients have benefited from the Bridgeworks use of machine intelligence technology in its – including NetApp, VEEAM, Veritas, IBM, CVS Healthcare and Caringo Swarm.
- Bridgeworks works with leading companies such as WANdisco, IBM, Intel, Emulex, Paramount Software Solutions, Spectra Logic, Dell, and Transact Technology Solutions.
- The combination of Commvault and PORTrockIT demonstrates technologies can work smarter, not harder. Bridgeworks PORTrockIT has shown Commvault how to accelerate data while mitigating data latency and reducing packet loss across WANs.