



a CELERA CASE STUDY

Boots & Coots

Array's aCelera virtual appliance for WAN optimization reduces backup and replication time, decreases network bandwidth utilization and costs, and helps achieve RTO/RPO goals

Background

Boots & Coots, a well control fire suppression and prevention company headquartered in Houston with offices worldwide, was facing a problem – the amount of data they were replicating multiple times each day for data protection was piling up and they were having queuing problems – replication jobs wouldn't have completed before the next job was scheduled to begin. After deploying Array Networks' aCelera™ WAN optimization virtual appliance, they were able to replicate data without interruption and reduce their network bandwidth utilization by up to 90 percent.

Challenges

Boots & Coots was experiencing the same troubles many organizations do in enabling data protection applications and disaster

Industry:

Energy

Challenges:

Inability to meet backup windows, lost productivity for IT staff, and increased bandwidth costs

Latency, low bandwidth, network contention, out-of-order packets and packet loss interfered with RTO/RPO goals

Solution:

aCelera WAN Optimization Controller virtual appliances at the headquarters as well as multiple global sites

Benefits:

A 90% reduction in backup and replication time, roughly 3x faster than the previous, hardware-based solution

More than 85% reduction in network bandwidth utilization

Savings on network bandwidth costs, CAPEX and OPEX

Latency reduced to 40 milliseconds between disaster recovery sites

Leveraged existing virtualized infrastructure

recovery across a wide-area network (WAN) – issues such as latency, low bandwidth, network contention, out-of-order packets and packet loss that interfered with its efforts meet their recovery time and recovery point objectives (RTO/RPO).

The company was unable to meet its backup windows, it had lost productivity for its IT administrators as they struggled to complete unsuccessful backups and they had to continuously spend for bandwidth that they might not otherwise need.

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Dwayne McCoy
IT Manager, Boots & Coots

Dwayne McCoy, IT manager, had installed eight hardware-based WAN acceleration appliances in Boots & Coots offices worldwide to optimize the bandwidth and decrease latency of the replication process. He hoped in deploying these appliances to improve his backup process and be able to meet his recovery time and recovery point objectives. But, he was still experiencing problems.

"The first problem I was trying to solve was replicating a massive amount of data across a relatively small bandwidth," says McCoy. "I have 20MB of bandwidth between my two sites for

disaster recovery and it was almost impossible to replicate the data without some type of WAN optimization."

McCoy snapshots about 50GB of data and replicates it across the WAN from Houston to Austin, Texas, using software included with his Dell EqualLogic PS Series storage area network (SAN). Depending on the business-criticality of the data, it is snapshotted every 30 minutes to once a day and replicated continuously to the Boots & Coots facility in Austin, Texas.

His RTO for the company's accounting and inventory software and a few file shares required for regulatory compliance is four hours. And his RPO is 30 minutes.

He used the hardware-based WAN acceleration appliances for several years and constantly struggled with three issues: the appliances were expensive, needed to perform better and be easier to deploy. In addition, he was not receiving the level of support that he needed from the vendor.

Solution and Results

McCoy set out on a search for an alternative to his hardware WAN optimization appliances. A veteran of server virtualization – McCoy's IT staff had virtualized all of their servers on five VMware ESX host computers – McCoy chose Array Networks and its aCelera virtual appliance to meet his WAN optimization needs.

"I chose aCelera for several reasons," says McCoy. "Number one was its performance. Number two was the level of support and the quality of the employees. And, number three was the cost – the aCelera virtual appliance was significantly less than any other competition."

In 2009, McCoy deployed each version of aCelera on its own dedicated ESX server. As a virtual appliance, aCelera leverages the scalability and

ease-of-use features of virtualized environments. aCelera accelerates data replication by removing network barriers such as low bandwidth, high latency, and network congestion which can cause many of the problems that Boots & Coots was experiencing with their backup environment. "Array's product works better than any other WAN optimization solution – it's more cost-effective and it's easier to deploy since it runs as a virtual machine. You download an image and you're done. And, it doesn't get any easier than that."

As a result of deploying aCelera, McCoy has cut his latency between his two disaster recovery sites to 40 milliseconds. And, he says that without aCelera, he wouldn't be able to replicate data and "offer the company up to 30 minutes of data availability and RPO. If I didn't have a WAN optimization appliance I would have to cut the amount of data I replicate in half, if not more."

McCoy adds, "The employees that work at Array Networks are different than at any other company. They care. When you call for support, you don't get the typical 'is it plugged in' question. They handle you in a professional way but they are still relaxed. They don't pressure you."

Benefits

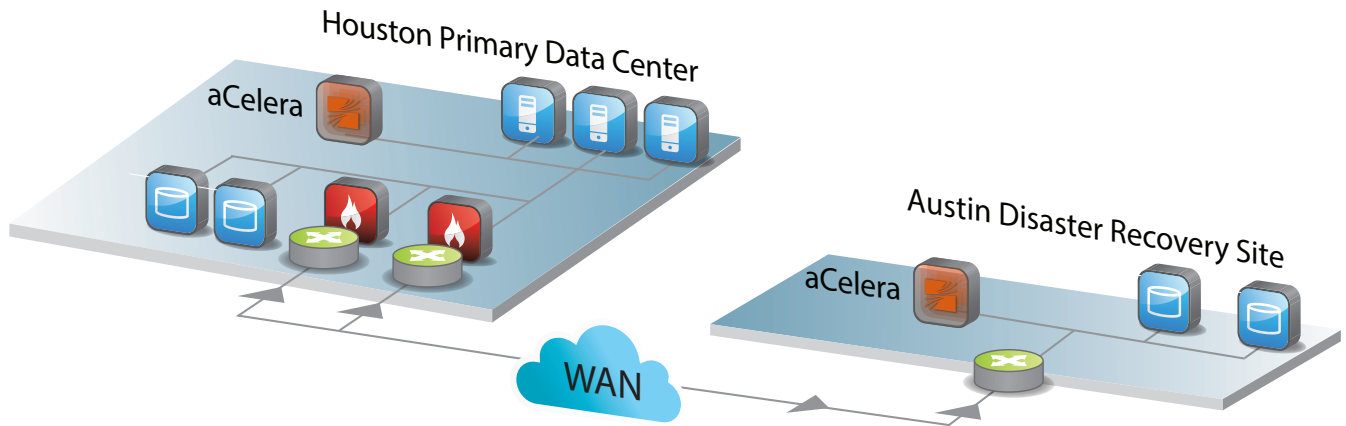
Since deploying aCelera, McCoy has experienced a variety of other benefits. Among them are:

- A 90% reduction in backup and replication time, 3x faster than a hardware-based WAN acceleration appliance.
- An 86-92% reduction in network bandwidth utilization.
- A 50% cost savings from using the virtual appliance as opposed to a hardware-based appliance.

- A savings of \$700 a month in network bandwidth alone.
- A savings of \$2,000 a year for maintenance of the WAN optimization appliance.

Perhaps the most telling benefit of deploying the aCelera WAN acceleration solution is McCoy's closing comment: "If I did not have WAN optimization, I couldn't replicate data. I would have to have a fiber-optic connection between Houston and Austin and the cost wouldn't even be worth it. It just wouldn't work."

As for future plans, McCoy is bent on replacing all his hardware-based WAN optimization appliances with aCelera. "aCelera is working as it should. It does everything it's supposed to do and it has better performance, is more cost-effective and has better support."



By Deni Connor, principal analyst
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