

Keep Your Data Safe

Our tests reveal that CA ARCserve Backup r15 is more mature, more capable, faster and less expensive. CA ARCserve Backup r15 is clearly the best choice for protecting and managing your data.

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EXECUTIVE SUMMARY

CA's ARCserve Backup r15 performs far faster, far more reliably and far more efficiently than Symantec's Backup Exec 2010. CA ARCserve Backup is easier to use, offers more built-in features, is more scalable and – icing on the cake – costs far less. ARCserve easily bested Backup Exec in each and every one of our tests.

CA's ARCserve Backup data deduplication uses a fraction of the computing resources that Symantec's Backup Exec 2010 data deduplication uses. CA ARCserve Backup makes quick work of maintaining backup copies of your company's information, and retrieving that data is as simple as pointing at the data and clicking on where you want it to go.

We found CA ARCserve Backup r15 to be painless and effective insurance against lost or damaged data.

Outshining the competition again in this year's test, CA ARCserve Backup wins the Network Testing Labs World Class Award for best data protection.

OVERVIEW

The ideal backup/restore system manages your data effortlessly and easily. It makes reliable copies of company information and can retrieve that information at a moment's notice. The perfect system is easy to use and even gives you a graphical view of where the instances of your data reside and when they were created. Ideally, you can back up – or restore – data at a fine level of granularity.

The ideal system is quick and unobtrusive, consuming computer resources (server CPU, disk space and network bandwidth) frugally. It's secure, robust and scalable. It furthermore supports all the operating systems you employ in your business. The ideal backup/restore system lets you stop worrying about natural disasters, server crashes, thumb-fingered users and other calamities.

In the ensuing year since we last looked at market-leading backup/restore approaches, both CA and Symantec have made important changes to their products. For this reason, we decided to revisit CA's ARCserve Backup r15 and Symantec's Backup Exec 2010 to discover if Backup Exec's 2010 many changes had perhaps helped it to surpass ARCserve. In our Alabama network lab, we put ARCserve Backup r15 and Backup Exec 2010 through their paces. We closely examined each for flaws, disparities, features and performance.

This year, CA's ARCserve Backup emerged – again – the winner in our testing. ARCserve Backup proved to be more reliable, robust and faithful at backing up and restoring all kinds of data. Its data deduplication feature was considerably faster and more efficient, and ARCserve made our data visible to us in especially intuitive and helpful ways. ARCserve was easier to use, scaled better, offered more features and was less expensive both to buy and to use.

Testbed and Methodology

Virtually all testing took place across 512 kb/s frame relay, T1 and T3 WAN links. The testbed network consisted of six Fast Ethernet subnet domains routed by Cisco routers. NTL's lab includes 150 clients consisting of computing platforms that included Windows 2000/2003/XP/Vista/Win7 and Red Hat Linux (both server and workstation editions).

The relational databases on the network were Oracle 8i, IBM DB2 Universal Database, Sybase Adaptive Server 12.5 and Microsoft SQL Server 2005. The network also contained three Web servers (Microsoft IIS, Netscape Enterprise Server and Apache), three e-mail servers (Exchange, Notes and Sendmail) and several file servers (Windows 2003 Server).

The virtual computing environments consisted of VMware and Microsoft Hyper-V. A Compaq Proliant ML570 computer with four 900 Mhz CPUs, 2G bytes RAM and 1.3 T bytes hard disks, running Windows 2000 Advanced Server, Windows 2003 Advanced Server and, at other times, Red Hat Enterprise Linux, was our test platform for all the products' server components.

Performance

The seconds that tick by while you wait for a backup or restore operation to complete might as well be dollar bills flying out the window. You need the data copied – NOW – so you can get on with business.

Using far fewer computing resources (CPU, disk and bandwidth), CA's ARCserve backed up our files over 20% faster than Symantec's Backup Exec did. ARCserve was similarly nimble and quick during restore operations.

Across a large collection of disparate file types, CA ARCserve Backup r15's average time to back up files was just 33.8 minutes, while Symantec Backup Exec 2010 trailed far behind with an average 44.2 minutes. ARCserve's r15 average elapsed time during restore operations was 39.4 minutes, but Backup Exec 2010 needed 53.6 minutes for the same data sets.

Chart 1 illustrates the backup/restore performance difference between CA ARCserve Backup r15 and Symantec Backup Exec 2010.

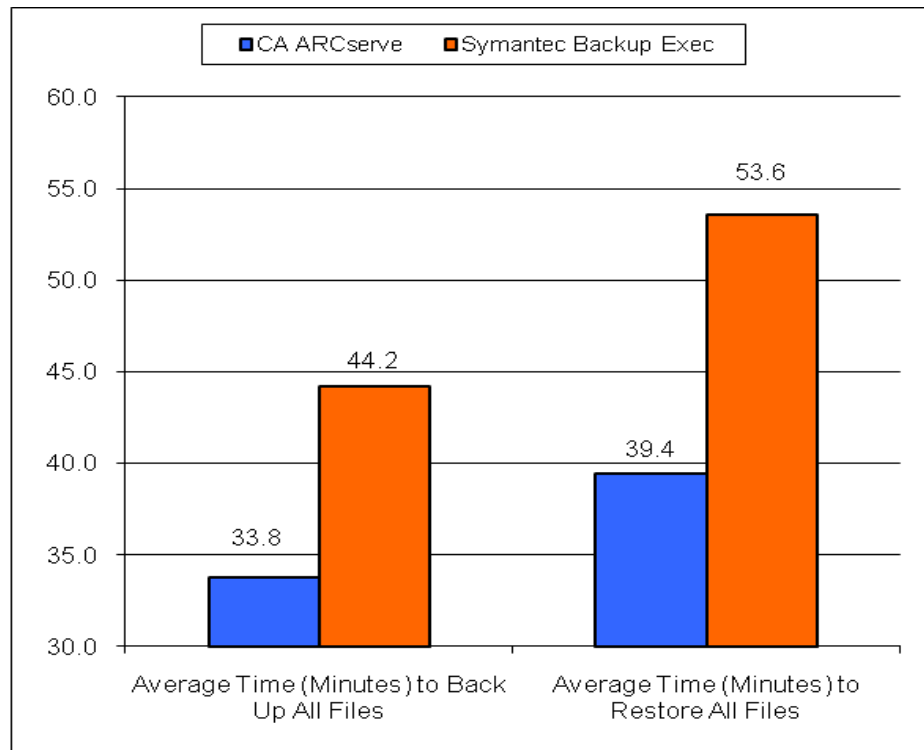


Chart 1. Backup/Restore Performance.

To attempt to match CA's ARCserve Backup more closely, Symantec added a new data deduplication feature to Backup Exec 2010. However, we found the implementation of data deduplication in ARCserve to be faster and more efficient.

Chart 2 graphically shows ARCserve Backup's advantage in disk space usage after just four weeks of simulated backup copies of multiple servers (database, file, e-mail). ARCserve achieved a 6.2 to 1 ratio of savings, but Backup Exec 2010 managed only 3.4 to 1.

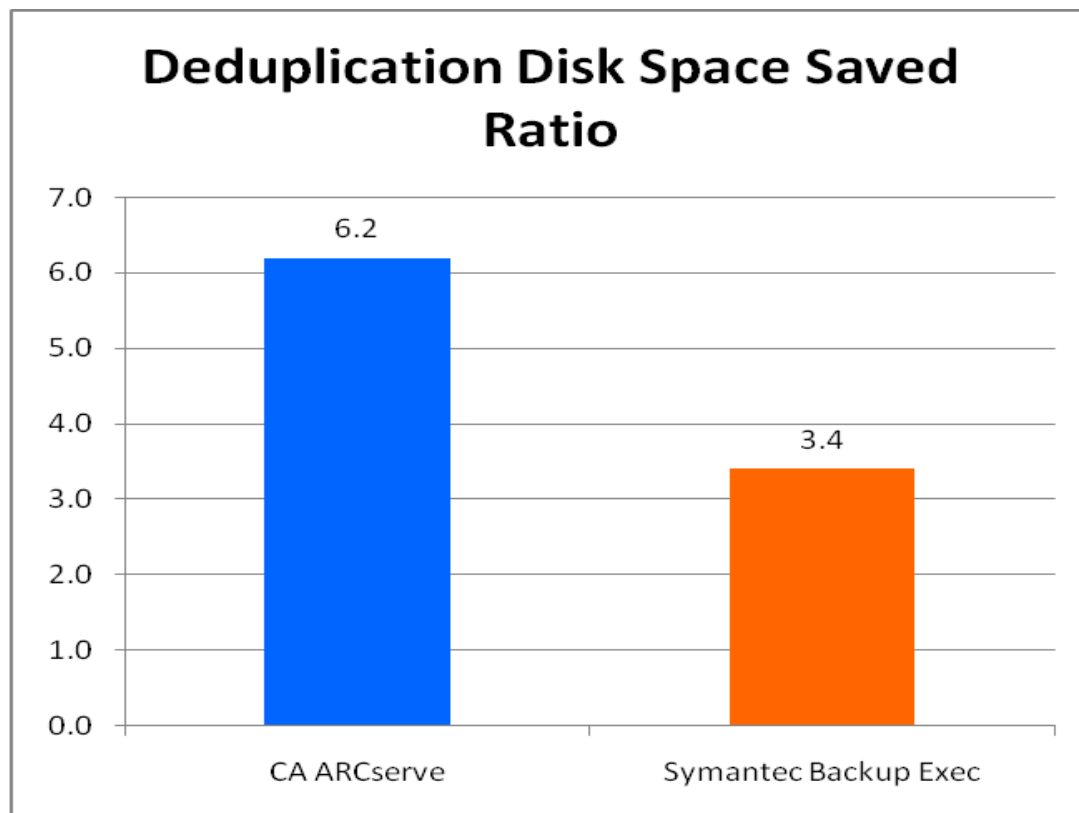


Chart 2. Media Volume Savings from Data Deduplication

We also found that CA ARCserve Backup r15 used computing resources more frugally than did Backup Exec 2010. Chart 3 illustrates ARCserve Backup's and Backup Exec 2010's bandwidth usage during backup operations. CA ARCserve Backup needed only an average of 16 Mb/sec to do what Backup Exec 2010 required 29 Mb/sec to accomplish. That's an amazing difference – and an amazing savings in computing resources.

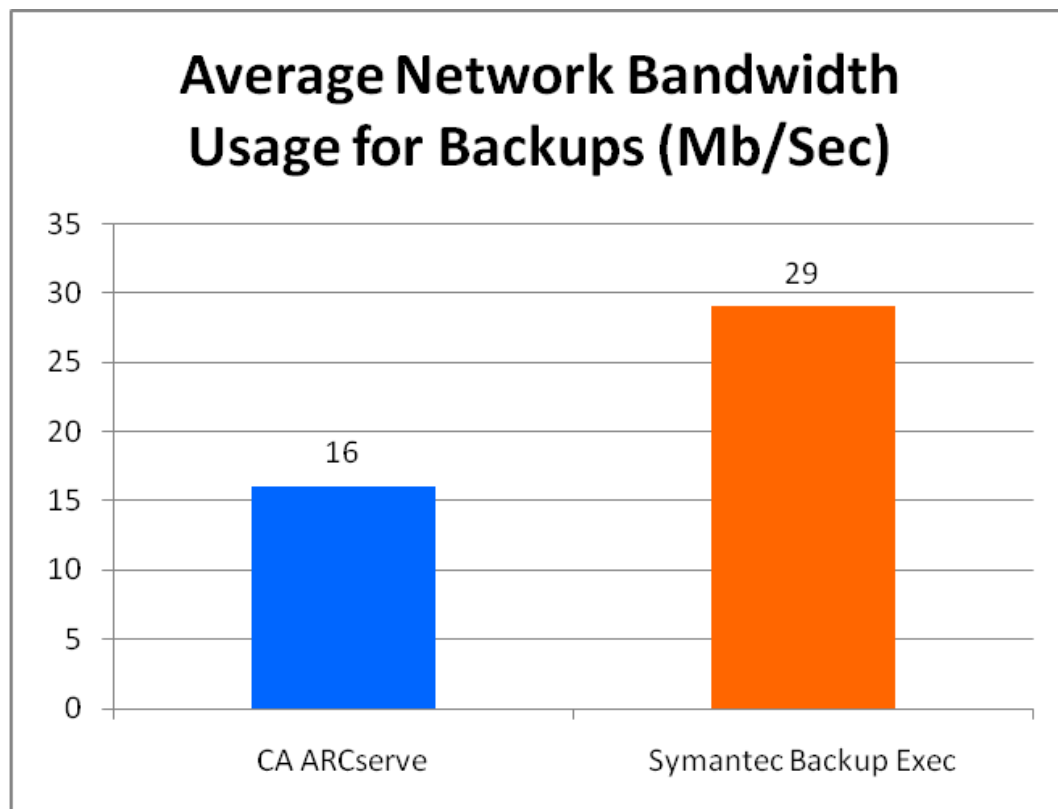


Chart 3. Network Bandwidth Usage During Backups

Not only is CA ARCserve Backup r15's data deduplication superior to Symantec Backup Exec 2010's, it's a no-cost, built-in feature with ARCserve. Symantec charges extra if you want data deduplication.

CA's ARCserve Backup r15 outperformed Symantec's Backup Exec 2010 in every category. We concluded that the more mature ARCserve has had time to undergo tuning, refinements and improvements that Backup Exec has not yet been able to experience.

Ease of Use

CA ARCserve Backup's faster performance makes it more responsive than Backup Exec. Further, CA ARCserve Backup has a more intuitive, easier-to-navigate user interface. For example, ARCserve's thoughtfully-designed dashboard reveals, at a glance, the current status of your backup/restore activities. In contrast, Symantec's Backup Exec 2010 lacks the ability to quickly drill down to show the level of detail that ARCserve shows. Backup Exec did give us a useful real-time overview of backup/restore status information.

Data visibility is critical when you're desperately trying to put the right data in the right place so you can resume normal business operations after a restore operation. CA ARCserve Backup r15 has a built-in graphical display of what was backed up and when, making working with backup copies a breeze. Symantec's equivalent, from a third-party vendor (Altiris) that Symantec acquired, is more difficult to use, has a user interface quite distinct from Backup Exec's and, to add insult to injury, is an extra-cost add-on to Backup Exec.

Conclusion

CA's ARCserve Backup r15 is a trustworthy and faithful keeper of company information. It implements significant technologies to make your life easier, and CA ARCserve Backup is clearly the best strategy for ensuring that your data is where it needs to be when it needs to be there.

Report Card

Grade scale is A through F, with F = Failing and A = Perfect

Category and weight (%)	CA ARCserve Backup 15	Symantec Backup Exec 2010
Backup and Restore (30%)	A	B
Performance (20%)	A	C
Ease of Use (10%)	A	C
Reports (10%)	A –	A –
Deployment (10%)	A	C +
Documentation (10%)	B	B
Overall Score	A –	C

About the Author

Barry Nance is a networking expert, magazine columnist, book author and application architect. He has more than 29 years experience with IT technologies, methodologies and products. Over the past dozen years, working on behalf of Network Testing Labs, he has evaluated thousands of hardware and software products for ComputerWorld, BYTE Magazine, Government Computer News, PC Magazine, Network Computing, Network World and many other publications. He's authored thousands of magazine articles as well as popular books such as *Introduction to Networking (4th Edition)*, *Network Programming in C* and *Client/Server LAN Programming*.

He's also designed successful e-commerce Web-based applications, created database and network benchmark tools, written a variety of network diagnostic software utilities and developed a number of special-purpose networking protocols.

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