

Integrated Data Protection Appliances from Dell Technologies are faster than another competing platform in a series of 3rd party performance tests

By Andrew Glinka | June 2021

Lab test runs against a key data protection competitor conducted by a 3rd party prove that Dell EMC's integrated appliances allow setting of shorter backup and recovery windows for multi-server environments¹.

Principled Technologies (PT), a leading, trusted product test and evaluation service vendor, conducted this latest comparative test. Here is the link to their published [test results summary white paper](#).

Why are we excited with the results? It's yet another apples-to-apples lab test conducted by a 3rd party where results confirm Dell EMC's integrated data protection appliances are notably faster than the competition. In this case, faster than "Vendor Z."¹

Faster performance means shorter backup times. Shorter backup times mean more time to do other things. This is obvious when compared to a slower, less efficient backup and recovery appliance. Faster performance can also mean completing more backups during the time you've already allocated for this task. How much is that worth to you and your users?

The same, of course, applies to shorter recovery windows. The less time it takes to restore data, the less time your operations are disrupted. It's that simple. And *that* is important to your IT department and the success of your business and organizational operations.

And it's not just about freeing up time or doing more data backup. Time *is* money...and work costs time. But greater efficiency and fast performance can result in lower total cost of ownership (TCO) and \$\$ cost to protect numbers. Do the math. Ever estimate hidden costs from optimistic (i.e., inadequate, lowballed or wastefully overstated) sizing, hardware configuration, storage consumption, cloud usage fees and network resource requirements? They can quickly spiral out of control. The more you money you can save, the more you can move to where it is really needed!

The Test Scenario

PT tested Dell EMC's high-end DP8800 integrated data protection appliance 1:1 against a similar sized integrated appliance from a key competitor (Vendor Z). The scenario?

¹ Based on Principled Technologies report commissioned by Dell Technologies, "Set shorter backup and recovery windows for a virtual machine environment with a Dell EMC Integrated Data Protection Appliance solution," March 2021 comparing Dell EMC IDPA DP8800 vs. a leading competitive data protection appliance solution from Vendor Z. Actual results may vary.

A series of real-world, apples-to-apples performance backup and recovery tests on a simulated multi-server environment's VMs.

Specifically, PT sequentially scaled daily backups from zero to 1,000 VMs over 10 days (i.e., adding 100 new VMs for each day's backup window). They then backed up all 1,000 VMs daily for four additional days.

For the recovery scenario, each appliance provided instant access recovery for 10 VMs.

The Results

- For multi-server environments, the Dell EMC DP8800 backed up VMs considerably faster than Vendor Z's platform
- DP8800 solutions took much less time to back up a steady state total of 1,000 VMs/day over the last 4 days (no new VMs added) compared to Vendor Z
- Additionally, the DP8800, on average, took significantly less time than Vendor Z to complete an instant access restore of those 10 VMs (It was 12x faster!)

Below are backup test results presented in Principled Technologies' summary white paper. For brevity, PT rounded all times down to the minute after calculating the differences. [PT's science document](#) details their test methodology and actual daily backup performance results.

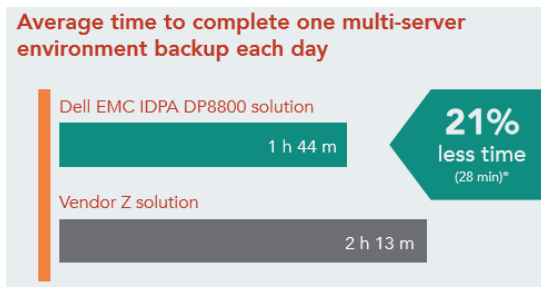


Figure 1: Average time per day in hours & minutes each vendor solution needed to back-up the VM environment during the entire 14 days. Lower is better.

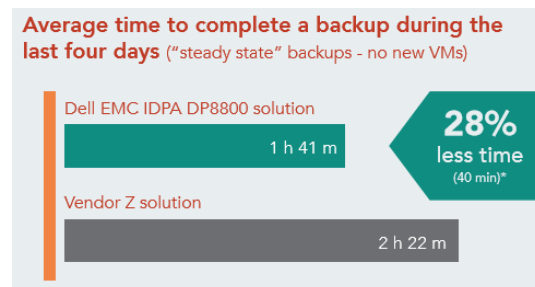


Figure 2: Average time in hours & minutes each vendor solution needed to backup the VM environment during the last four days of testing when PT did not add new VMs. Lower is better.

Source: Principled Technologies

As shown in Figure 1, Vendor Z took **2 hours and 13 minutes** to complete one multi-server environment backup each day, while the DP8800 was able to complete the same backup in only **1 hour and 44 minutes**. That's **29 minutes quicker** (a 21% time savings).

Now let's look at the average time required to backup 1,000 full VM daily over the last 4 days (i.e., day 11 thru 14). As shown in Figure 2, the results were *quite significant* in that Vendor Z took **2 hours 22 minutes** on average compared to DP8800's **1 hour 41 minutes**. That's **41 minutes less time**... (28% less time) ...over that four day steady state backup window. A significant time savings, for routine, heterogeneous multi-server VM backup at steady state with no new VMs added after day #10.

From a technical perspective, the Dell EMC's data reduction advantage also means less consumed storage. PT also measured storage consumption for the two integrated appliances while backing up VMs. Note the results below. Less storage consumed is better.



Source: Principled Technologies

With less required storage space needed for backups, it could help your organization reduce storage CapEx over time. How? By slowing storage utilization rates, thereby stretching usable storage and/or extending the time before you need to add additional storage capacity or even undertake an appliance refresh.

These results confirm what Dell Technologies customers have experienced for years. As data grows, faster performance and resource efficiency matter more than ever.

It only gets better from here

In closing, compared to “Vendor Z” -- our DP8800 appliance allows you to do backup and recovery faster and more efficiently.

Even better news – our recently announced integrated appliance, the PowerProtect DP series, and the target data storage appliance, the PowerProtect DD series, is expected to deliver even better backup and recovery times thanks to new advances in appliance technology and an increase in data reduction performance.

So, check out our PowerProtect appliances webpage [here](#) or reach out to your Dell sales representative or Dell partner.