

Top 10 Things to Look for in a Backup Appliance

WHITE PAPER

In today's era of exponential data growth, backup appliances have become a go-to solution in supporting companywide data management goals. An appliance can reduce IT complexity, shorten backup windows, improve data protection and shrink the storage footprint. The right solution also reduces cost and risk in disaster recovery, regulatory compliance and e-discovery.

Even with the emergence of cloud backup options, IT leaders are still turning to backup appliances because they are easy to use and cost-efficient—while giving IT teams greater control over their data. With a modern integrated backup appliance, you can even back up to the leading public cloud services.

Given the enormous benefits of backup appliances, it should be no surprise that the market is still going strong. According to one survey, the backup appliance market is expected to grow at a compound annual rate of 11% through 2021.¹

The reality, however, is that not all backup appliances are created equal. Vendors have taken different approaches to their solutions, and IT decision-makers should be aware of these differences when evaluating them. Here are the top 10 criteria to look for in evaluating a backup appliance solution and vendor.

¹ "Global Purpose-Built Backup Appliance Market 2017-2021," Technavio, August 2017

NO. 1: EASE OF USE

The right backup appliance should be extremely easy to install, deploy, manage and scale. It should have everything pre-installed, including the hardware, operating software and backup software. The hardware and software should be optimized to work together. You should also be able to turn to your vendor if you have to relocate the appliance from one site to another. The idea is to use your internal IT team to focus on driving your business forward, rather than dealing with infrastructure challenges. Building your own backup and recovery solution can be costly, time consuming and complex. Compared with the simplicity of using an appliance, you will find that building your own solution may not be worth the time, cost or effort.

NO. 2: AN INTEGRATED MODEL

There are two general types of purpose-built backup appliances: target systems and integrated systems. Target systems are used in conjunction with third-party backup software and designed to integrate into heterogeneous environments. Integrated systems are tightly integrated with backup software to orchestrate the backup and movement of data.

An integrated system is much simpler to deploy and scale. In today's environment, target systems make little sense. They are complex to manage, and if there is a problem, you are dealing with multiple vendors. If ease of use is a critical factor in deploying a backup appliance, why choose a solution that adds complexity?

NO. 3: CONSOLIDATION

One of the biggest challenges facing many organizations is too many silos of information, which makes it difficult to effectively leverage data across the enterprise. Many midsize and large organizations have multiple backup applications. Maintaining multiple backup products is expensive, time-consuming and counterproductive. Given the challenges in today's market, with digital transformation, the Internet of Things, big data analytics and other organizational imperatives, this is an untenable situation. Look for a solution that enables you to consolidate all of your backup solutions into a single unified data protection platform—including separate physical or virtual data protection platform.

NO. 4: COST SAVINGS

Your organization can save considerable time and money by consolidating multiple backup solutions into one platform. Integrated appliances can help to speed the conversion process. You achieve significant Opex savings by eliminating the tasks involved in installing, configuring and integrating backup software with target deduplication systems. Licensing is another potential area of cost savings. It is sometimes a hidden cost by vendors that can add up fast. Look for a vendor that can offer a perpetual front-end-capacity-based licensing model. This approach reduces total cost of ownership and provides investment protection because licenses can be transferred to supported hardware platforms or future appliances.

NO. 5: PROVEN SOFTWARE

There are a lot of backup software options in today's market, so it is important to choose a solution that delivers a proven set of features and functions. Look for a solution that incorporates proven, industry-leading backup software to ensure that you are deploying a powerful, scalable and reliable appliance platform. In an ideal situation, you will work with a backup software provider that also offers an appliance that directly integrates the software with leading edge hardware. This will make it simple and cost-effective to implement a backup and storage solution with proven and reliable backup software.

NO. 6: CLOUD SUPPORT

The availability of public cloud services for backup is creating new opportunities for organizations. However, cloud storage can get expensive based on what you plan to store in the cloud. You can reduce the storage footprint in the cloud by moving deduplicated data to the cloud. While there are cloud gateway appliances that can move deduplicated backup data to the cloud, they must deduplicate data in their own format. This often requires two deduplication steps: first for the system, then for the cloud. Look for an appliance that can send deduplicated data directly to the cloud. This eliminates a step, which saves you time and money. You can also reduce risk and improve disaster recovery by using an appliance to back up the major cloud services. For example, the NetBackup CloudCatalyst appliance can move deduplicated data directly from a NetBackup appliance to multiple clouds, including Amazon Web Services, Microsoft Azure and Google Cloud.



NO. 7: HIGH AVAILABILITY

Any downtime—planned or unplanned—is anathema to today's always-on business environment. The cost of downtime has increased by 38% since the beginning of the decade.² More than 80% of companies report that a single hour of downtime now costs over \$300,000; a third of large companies say an hour of downtime costs between \$1 million and more than \$5 million.³ You want to be able to choose a high-availability option with your backup appliance. One way to accomplish this is to use a configuration that has two media servers. This way, you never have to take the appliance down for servicing. It also reduces risk and lowers Opex costs. You should consider high-availability solutions that are active-active, so that, under normal circumstances, they are both running at the same time. This will give you an enormous boost in performance compared with active-passive solutions.

² "Cost of Data Center Outages," Ponemon Institute, January 2016

³ "The Cost of Downtime Soars: 81% of Enterprises Say It Exceeds \$300K on Average," Information Technology Intelligence Consulting, Aug. 2, 2016

NO. 8: PERFORMANCE OPTIMIZATION

One of the advantages of using a appliance integrated by a single vendor is the ability to achieve high backup and recovery performance via distinctive capabilities offered strictly by that vendor. One example is multidimensional scalability. With this capability, performance can be scaled to run tens of thousands of backup jobs per day with optimizations in the appliance and multiple appliances. IT can distribute both backup and deduplication processing to multiple media servers and clients and unique technologies.

NO. 9: FLEXIBILITY

Your backup appliance should be compatible with existing software so that it can be easily integrated into your environment. This will eliminate complex or disruptive migration processes or time-consuming retraining. The appliance should also have the flexibility to support source-based and target-based deduplication, in-line or post-process deduplication, and virtual and physical environments. Finally,

you should be able to leverage specially configured backup appliances for some of your most important use cases, such as backing up your Oracle database environment.

NO. 10: WORKING WITH A LEADING PROVIDER

One of the most important things to remember is that your backup and recovery platform is not an isolated solution in an isolated environment. It should be used in support of an overall enterprisewide approach to data management that focuses on insight, availability and protection. Working with a vendor that views your data management challenges holistically is extremely important when it comes to backup and recovery. This will help you reduce risk, manage costs and maintain visibility and control of your data wherever it is located—physical, virtual or cloud. The ability to offer a comprehensive “360” approach to data management is one of the qualities that sets Veritas apart from others. In addition, Veritas provides unique capabilities through ease of use, flexibility, consolidation and the opportunity to leverage NetBackup as part of an integrated solution.

CONCLUSION

These are challenging times for IT departments. With digital transformation, big data analytics and other modern initiatives, IT must be focused on adding value to their organizations. While backup, protection and recovery represent vital areas for the company, IT teams can be far more strategic when they simplify the deployment and management of infrastructure for these functions.

Backup appliances have been and continue to be an important solution in driving ease of use, cost savings, business agility, availability and risk reduction. But choosing the right solution and the right vendor is crucial. With Veritas NetBackup Appliances, IT gets the best of both worlds: a solution that delivers on all of the key capabilities discussed in this paper, and a vendor that is a longtime leader in data management with a clearly articulated vision for the future.

For more information on how to choose the best backup appliance for your organization, please contact Veritas [here](#).