EMC Data Protection Advisor 5.5 for Automated Management of Backup, Replication, and More

Analyst: Michael Fisch

Management Summary

Have you ever taken an automobile to a repair shop and had the mechanic say, "If we replace this part, it might fix the problem. That will cost $500." After replacing the part, the problem is still there and the mechanic says, "Well, we could try replacing this other part…" And so it goes, part by part, running up the bill, until finally the problem is fixed by a process of elimination. "Wow, if we had only known from the start what exactly caused the problem."

Maintaining and repairing a data protection environment can be similarly challenging, because backup and replication systems are complex and depend on all the elements of an IT environment and the interconnections between them, including applications, servers, virtualization layers, networking, and storage. In fact, managing data protection can be even more challenging than fixing a car because you may not know a problem exists until an application goes down and immediate data recovery is a necessity. This is definitely not the time you want to discover that a backup job did not complete or that the replication mirror is not current!

To address these challenges, EMC recently announced *Data Protection Advisor 5.5*, the latest version of its software tool for managing data protection environments with real-time monitoring, analysis, and reporting. Formerly known as *Backup Advisor*, EMC renamed it Data Protection Advisor about a year ago when its scope expanded beyond traditional backup. The new version continues this expansion by adding or expanding support for:

- Replication for EMC *Symmetrix* and *CLARiiON* storage platforms and EMC *RecoverPoint* appliance for heterogeneous replication
- VMware *vCenter* integration for virtual server environments
- Chargeback reporting for data backed-up or replicated
- EMC *Data Domain* deduplication storage
- EMC *Celerra* unified storage

With Data Protection Advisor version 5.5, EMC provides additional ways to make sure data is protected and ready to recover in the event of a system failure or disaster. It also streamlines data protection and helps get the most out of existing infrastructure by highlighting bottlenecks and configuration problems. Read on for details.

Data Protection Means Business Continuity

Data protection management is about business continuity, which is the ability of an enterprise to endure a system failure or disaster and continue operating without inordinate losses or downtime.

IN THIS ISSUE

From an IT perspective, the continuity of business operations depends on information access, which depends on effective data protection and recovery, and backup and replication are tools to that end.

However, it is a challenge to maintain backup and replication systems in a continuous state of readiness in complex, changing IT environments. *How do you know these protection technologies are working consistently and effectively? Are all backup jobs completing? Are all replication targets consistent and able to meet your recovery point and recovery time objectives?* Answering these questions is not trivial because they depend on the proper functioning and interplay between storage, networks, servers, virtualization layers, and applications. Configuration changes, insufficient capacity, or bottlenecks in the IT infrastructure can have negative ripple effects on data protection.

The traditional management approach of collecting backup and replication information from multiple device managers and using script and manual processes is labor-intensive and cannot be done frequently or thoroughly enough to catch all of the issues that may arise. It is a situation that cries out for an intelligent, automated solution.

In the previous repair shop analogy, we did not mean to pick on mechanics because some problems are genuinely elusive and hard to diagnose, whether for automobiles or data protection environments. But, what if your vehicle had a software tool that automatically checked the performance of every component as well as the connections between them, and displayed a summary report on your dashboard? It might make comments like:

- *Your vehicle stalled because of an intermittent electrical short in the alternator. Recommend replacement.*

- *The front brake pads will wear out within 30 days. Recommend replacement.*

Such an invention would save time, headaches, and money. While we are still waiting for the automobile version, Data Protection Advisor provides a similar capability for data protection.

EMC Data Protection Advisor 5.5

EMC Data Protection Advisor is a software tool for centralized management of data protec-

tion environments. It monitors the infrastructure in real-time and gathers data from multiple elements, including storage arrays, tape libraries, servers (physical and virtual), applications, file systems, and networking equipment. Then it analyzes the data and delivers reporting that helps administrators keep it running efficiently, while complying with service-level requirements for backup and replication.

Data Protection Advisor 5.5 adds several new capabilities.

Replication Support for EMC Platforms

It now supports clone and snapshot copies and remote mirroring for EMC *Symmetrix* and *CLARiiON* storage platforms and the EMC *RecoverPoint* appliance for heterogeneous replication. More specifically, Data Protection Advisor discovers and graphically maps *Time-Finder* and *SRDF* for Symmetrix and *Mirror-View* and *SnapView* for CLARiiON. It tracks the completeness of replication targets as well as application consistency and service-level compliance. For RecoverPoint version 3.1 and above, it gives insight into link status, network usage, and replication lags for continuous data protection (CDP) and continuous local and remote replication.

The bottom line is that administrators get visibility into application recoverability for EMC replication technologies. From a centralized console, they can see the status of recovery time and recovery point objectives.

VMware vCenter Integration

vCenter is VMware's centralized management console for virtual server environments. EMC now has a vCenter plug-in for Data Protection Advisor that gives administrators the same visibility into backup status for virtual servers as for physical servers.

Enhanced Chargeback Reporting

It facilitates chargeback by department or application by accurately reporting the amount of data backed up or, for RecoverPoint, the amount replicated and transferred. Chargeback is a vehicle for financial accountability in an organization and is an important part of the trend of delivering IT as a service.

Expanded EMC Data Domain Support

Deduplication has become a mainstream technology for backup. By reducing the volume of data stored, it facilitates the transition to

cost-effective, disk-based backup and restore.

Data Protection Advisor now has enhanced support for the Data Domain deduplication storage system EMC acquired earlier this year. It tracks deduplication ratios and other status and configuration information. With this addition, it provides unified deduplication monitoring and management for EMC Avamar, NetWorker, and Data Domain.

Expanded EMC Celerra Support

It expanded support for Celerra unified storage to include monitoring and reporting of CPU, memory, performance, and capacity. It maps and monitors Celerra Replicator source and target volumes.

Conclusion

EMC Data Protection Advisor 5.5 takes a solid step forward in supporting EMC's numerous replication technologies for remote mirroring, point-in-time copies, and CDP. Data Protection Advisor now supports heterogeneous backup applications[1] and EMC replication technologies.

If your enterprise backup environment has any degree of complexity, then EMC Data Protection Advisor is a good solution for automated data protection management. If you are also using EMC replication technologies, whether for Symmetrix, CLARiiON, Celerra, or RecoverPoint, then Data Protection Advisor just became even more attractive.

At the end of the day, this is about maintaining the availability of critical data and keeping the business running smoothly. Consider an automated data protection management solution, because it can definitely help with this important and non-trivial task!

SM

---

[1] EMC *Networker* and *Avamar*, Symantec *NetBackup*, *Puredisk*, and *Backup Exec*, IBM *Tivoli Storage Manager*, HP *Data Protector*, *Commvault*, *ArcServe*, Oracle *RMAN*

About The Clipper Group, Inc.

The Clipper Group, Inc., is an independent consulting firm specializing in acquisition decisions and strategic advice regarding complex, enterprise-class information technologies. Our team of industry professionals averages more than 25 years of real-world experience. A team of staff consultants augments our capabilities, with significant experience across a broad spectrum of applications and environments.

➢ *The Clipper Group can be reached at 781-235-0085 and found on the web at www.clipper.com.*

About the Author

Michael Fisch is Director of Storage and Networking for The Clipper Group. He brings over twelve years of experience in the computer industry working in sales, market analysis and positioning, and engineering. Mr. Fisch worked at EMC Corporation as a marketing program manager focused on service providers and as a competitive market analyst. Before that, he worked in international channel development, manufacturing, and technical support at Extended Systems, Inc. Mr. Fisch earned an MBA from Babson College and a Bachelor's degree in electrical engineering from the University of Idaho.

➢ *Reach Michael Fisch via e-mail at mike.fisch@clipper.com.*

Regarding Trademarks and Service Marks

The Clipper Group Navigator, **The Clipper Group Explorer**, **The Clipper Group Observer**, **The Clipper Group** *Captain's Log*, **The Clipper Group Voyager, Clipper Notes**, and *"clipper.com"* are trademarks of The Clipper Group, Inc., and the clipper ship drawings, *"Navigating Information Technology Horizons"*, and *"teraproductivity"* are service marks of The Clipper Group, Inc. The Clipper Group, Inc., reserves all rights regarding its trademarks and service marks. All other trademarks, etc., belong to their respective owners.

Disclosure

Officers and/or employees of The Clipper Group may own as individuals, directly or indirectly, shares in one or more companies discussed in this bulletin. Company policy prohibits any officer or employee from holding more than one percent of the outstanding shares of any company covered by The Clipper Group. The Clipper Group, Inc., has no such equity holdings.

Regarding the Information in this Issue

The Clipper Group believes the information included in this report to be accurate. Data has been received from a variety of sources, which we believe to be reliable, including manufacturers, distributors, or users of the products discussed herein. The Clipper Group, Inc., cannot be held responsible for any consequential damages resulting from the application of information or opinions contained in this report.