

EMC DATA PROTECTION ADVISOR

Solving the problem of inefficient and costly manual IT and SLA management

ESSENTIALS

- Industry-leading data protection management solution reduces cost, improves SLA compliance and lowers risks, and reduces complexity
- Single, unified solution monitors, analyzes, and reports across backup, replication, and NAS infrastructure
- Capabilities include monitoring, alerting, troubleshooting, optimization, capacity planning, and reporting
- Leverage Data Protection Advisor for your physical and virtual environments
- Broadest support of any solution for backup applications, supporting components, and replication

Effectively managing your data protection environment is often labor intensive and complex. It requires knowledge of the backup applications, replication technologies, and the entire supporting infrastructure. Adding to the complexity, there are varying service-level agreements (SLAs) for backup, replication, and virtualization, as well as audit and compliance requirements to consider.

With EMC® Data Protection Advisor, you can automate and centralize the collection and analysis of all of this data—and get a single, comprehensive view of your data protection environment and activities. With automated monitoring, analysis, and reporting across your backup infrastructure replication technologies, file servers, and virtual environment, you will be able to more effectively manage SLAs while reducing costs and complexity.

HOW IT WORKS

A key component of Data Protection Advisor is the proactive analysis engine, which—along with its powerful central data mine—drives the solution’s monitoring, alerting, troubleshooting, optimization, capacity planning, and reporting capabilities. The proactive analysis engine constantly monitors incoming data against a variety of rules, looking for failures, threshold exceptions, and developing conditions. The analysis engine can look for a failure on a critical host, repeated failures, growth of a backup that will exceed the backup window, missed SLAs, and resource utilization thresholds. It can also monitor replication environments for gaps in policy or configuration that will cause a recovery to fail. A standard rule-set can be used or customized to suit your requirements, and can monitor any of the resources or policies that Data Protection Advisor supports.



The rules and analysis engine is made more powerful by a central data mine that scales to support environments with tens of thousands of clients. This data mine stores data from all of the disparate components, backup applications, and replication technologies. It enables the analysis engine to monitor across multiple components, devices, domains, and locations, speeding access to the data without the need for access to many different systems.

Because the data mine collects data from multiple resources, it enables the analysis engine to correlate activities from multiple domains—providing visibility and insight to address previously unseen barriers, developing problems, and assets that are underutilized.

WHERE IT FITS IN YOUR ENVIRONMENT

Data Protection Advisor supports multiple technologies in your IT environment for backup, replication, file servers, and physical and virtual server infrastructures.

EMC DATA PROTECTION ADVISOR FOR BACKUP

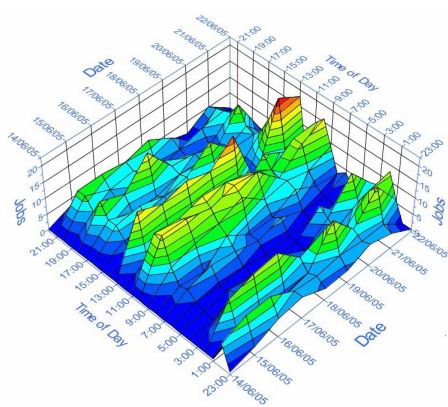
The support for backup is the most comprehensive in the industry, supporting 11 different backup solutions via a single user interface. Data Protection Advisor collects data from the supporting infrastructure as well as the backup application, providing visibility and access to the information to rapidly spot and troubleshoot problems, forecast capacity needs, and optimize existing resources.

When managing a backup environment, it is critical to have visibility into the infrastructure components as well as the backup application and its success and failures related to backup jobs. To provide that visibility, Data Protection Advisor supports the underlying components including virtual tape libraries, deduplication storage systems, clients, servers, LAN/SAN, switches, tape, and network-attached storage.

By collecting all of this information, Data Protection Advisor can provide monitoring, alerting, troubleshooting, capacity planning, optimization, and reporting across all of the supported technologies. This insight speeds and improves decision-making, resulting in reduced effort for backup and operations teams.

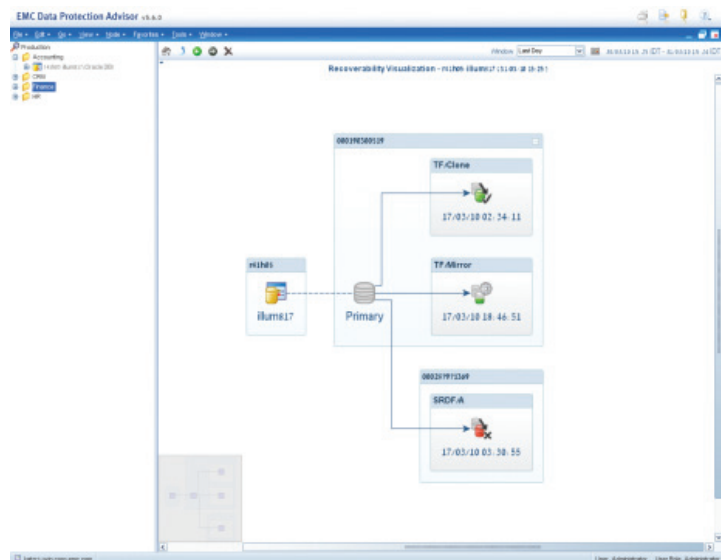
EMC DATA PROTECTION ADVISOR FOR REPLICATION TECHNOLOGIES

Data Protection Advisor replication support enables you to monitor replication technologies to improve the recoverability of data in a failover or disaster recovery environment. Businesses spend heavily to set up and maintain remote replication capabilities which include: a remote site, the servers and storage, and the bandwidth required to maintain the remote copy in synch with production systems. The value of this replication can be immeasurable if a production outage occurs and the remote copy starts up as designed, but it is worthless if that remote system fails to start.



EMC Data Protection Advisor provides a visualization of backup job activity on a day-to-day basis to facilitate load balancing.

Data Protection Advisor recoverability visualization provides an intuitive view of the replicated environment, easily identifying invalid copies requiring intervention.



TECHNOLOGIES SUPPORTED

Replication

- EMC Symmetrix®, SRDF®, and TimeFinder®
- EMC CLARiiON®, MirrorView™, SnapView™, and SAN Copy™
- EMC RecoverPoint, RecoverPoint/SE

Backup applications

- EMC NetWorker®
- EMC Avamar®
- Symantec NetBackup
- Symantec Backup Exec
- Symantec PureDisk
- IBM TSM
- HP Data Protector
- CommVault
- ArcServ
- Oracle RMAN

File server platforms

- EMC Celerra

Backup-to-disk platforms

- EMC Disk Library 4000/5000
- EMC Data Domain®

Tape Libraries

- Sun
- ADIC
- IBM
- HP
- Fujitsu

Database platforms

- Microsoft Exchange Server
- Oracle
- Microsoft SQL Server
- PostgreSQL

EMC Data Protection Advisor Server platforms

- Microsoft Windows
- Red Hat Enterprise Linux
- Sun Solaris
- SUSE Linux Enterprise

The replication analysis capabilities in Data Protection Advisor can detect a variety of situations where the replicated data may not be recoverable, even if there are no warnings to the contrary. To detect these conditions, the host, application, and storage configurations are cataloged and mapped to provide a graphical view of the replication configuration. The replication analysis can map both file systems and databases such as Oracle, Microsoft® SQL Server®, and Microsoft Exchange Server, detecting the structure and checking that it is replicated correctly. The tracking of the configuration information also means that there is no need to track layout information manually—Data Protection Advisor automates this and can generate a report whenever it is needed.

EMC Data Protection Advisor also provides a visualization of backup job activity on a day-to-day basis to facilitate load balancing.

Data Protection Advisor recoverability visualization delivers an intuitive view of the replicated environment, easily identifying invalid copies that require intervention.

EMC DATA PROTECTION ADVISOR FOR A VIRTUAL SERVER INFRASTRUCTURE

The integration with VMware® servers and hosted images enables the tracking of performance, resource consumption, data protection, and conflicting backup job schedules, as well as movement of host images between VMware ESX® systems. Using VMware support, in conjunction with backup infrastructure support, provides a comprehensive understanding of the protection of virtual environments, ensuring the most from your investment. Some key reports include: reporting on host images that are unprotected, showing overlapping backup windows that can impact server performance, and tracking host/system configuration.

EMC DATA PROTECTION ADVISOR FOR FILE SERVERS

Today's file servers are a key part of a company's environment, but the increases in complexity and criticality of file servers have often not been matched by an increase in visibility of operations. The number of features in today's file servers does not allow a "set it and forget it" approach.

Data Protection Advisor file server support provides all of the information needed to maintain the performance and efficiency of your EMC Celerra® file server environments, and enables file servers to continue to realize their full value. It provides full visibility of all file servers through a single interface, enabling performance tuning and utilization monitoring—going beyond day-to-day SLA monitoring and data protection.

DELIVERING VALUE TO YOUR ORGANIZATION

Data Protection Advisor delivers significant value by facilitating cost savings, improved compliance, and reduced complexity.

REDUCING COST AND INCREASING EFFICIENCY

With EMC Data Protection Advisor, you can manage multiple locations, cross-platform environments, and a variety of protection products with a single solution. By consolidating enterprise-wide information into a single management interface, administration efforts and associated costs are reduced, resulting in faster problem resolution, easy planning, and complete reporting.

The user interface enables you to drill into reports to discover the source of problems—so you can quickly fix issues and get back to business as soon as possible. The detailed views, reporting, and alerts increase confidence that data protection policies are working as designed.

Trend analysis and forecasts aid your organization's resource and capacity planning, tying them closely to business needs. Charts and reports enable administrators to easily see the peaks and valleys of activity and balance the workload to get more out of existing resources—rather than spending for more.

To reclaim costs, Data Protection Advisor automates chargeback for infrastructure usage based on several metrics such as quantity of data backed up, restored, or retained.

ENSURING COMPLIANCE AND ENHANCING RISK MANAGEMENT

Through realtime views of the entire backup environment, Data Protection Advisor helps you understand potential risks and exposures in data protection strategies across multiple backup products and domains. Support for replication technologies expands the monitoring of operations to include the recoverability of data. Advanced fault diagnosis and complete control over report intervals—down to the minute—make users aware of possible recovery exposure before disaster occurs. Data Protection Advisor reports help ensure that established backup service-level agreements are being met. Data Protection Advisor identifies areas of success, providing peace of mind that a system is working, applications are recoverable, and data is safe.

REDUCING COMPLEXITY

Change is the one constant in any IT environment. There are new applications, new technologies, and higher-performance storage and servers constantly creating. Within the IT infrastructure there are also many different interfaces, one for each component, and with the continuous changes, these interfaces are also changing and evolving.

A second challenge is the overwhelming amount of data created by these interfaces. Taken as a whole, it is impossible to manually monitor it all and pick out what is working correctly and what needs attention—until it fails.

Data Protection Advisor automatically collects and unifies access to data from all components, runs analysis rules constantly, and informs you when things need attention. This automated, unified approach to managing the data protection environment greatly simplifies the process of monitoring and tuning the environment to maximize utilization. Data Protection Advisor also minimizes the impact of the different interfaces and churns through volumes of data, simplifying data protection management and IT operations.

CONTACT US

To learn more about improving data protection management with EMC Data Protection Advisor, visit www.EMC.com or call 800.607.9546 (outside the U.S.: +1.925.600.5802).

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