

EMC Data Protection Advisor

Data protection management to solve today's critical challenges

The Big Picture

- Industry-leading data protection management solution improves cost and operational efficiency, compliance and risk management, and change management.
- Single unified solution collects, analyzes, and reports across all backup components, domains, and locations
- Capabilities include monitoring and alerting, troubleshooting, optimization, capacity planning, and reporting
- Extend reach of Data Protection Advisor with file server, database, and VMware options
- Broadest support on the market for backup applications and components

Solving the problem of inefficient and costly manual IT management

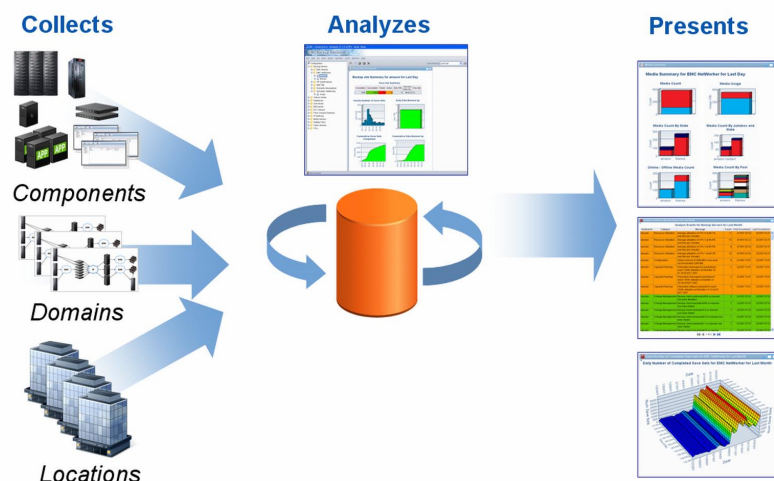
Effectively managing your data protection environment is often extremely labor intensive. It requires knowledge of not only the backup application, but also the surrounding components, including IP networks, hosts, file servers, tape, disk, and SAN. And there are varying backup applications, multiple service level agreements (SLAs), and regulatory and auditor requirements to consider.

To perform effectively, your database, system, and backup administrators must work closely and have the same priorities as operations. This issue is further complicated in small to medium sized businesses by the fact that individuals often wear many hats, may have a limited depth of knowledge in each area, and are often on call 24x7 via a pager with no IT staff on duty.

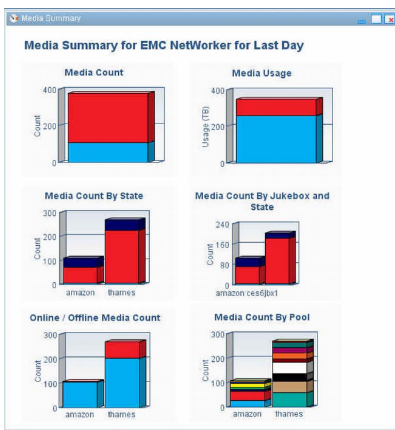
Managing many different resources is complex—each resource has its own interface with different access rights, commands, functionality, and reporting. To effectively address these issues, today's organizations need a centralized data collection and analysis solution that provides a single, cohesive view into their data protection infrastructure. EMC® Data Protection Advisor can help.

EMC Data Protection Advisor

EMC Data Protection Advisor collects, analyzes, and presents information from across your data protection environment, including all backup components, domains, and locations. The solution provides automated and continuous data collection, conditional analysis that triggers alerts, and a single, consistent interface for reporting. The result? Data Protection Advisor improves data protection, extends resources, and provides unique insight that delivers measurable returns now and into the future.



EMC Data Protection Advisor provides centralized data protection management of your entire environment, across domains and locations



EMC Data Protection Advisor provides a single view of systems and applications, consolidates backup information, and enables you to drill down to discover the source of problems

Cost and operational efficiency

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

Data Protection Advisor provides a single view of systems and applications, consolidates backup information, and enables you to drill down to discover the source of problems—enabling you to fix problems fast 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. Additionally, administrators can be notified automatically by e-mail of those events which can increase the risk of data loss.

The solution's accurate trend analysis and forecasts aid your organization's capacity planning and tie closely to business needs. Charts and reports allow administrators to easily see the peaks and valleys of activity and balance the workload to increase performance and optimize resources. Resource consumption can be forecast into the future to enable better planning and budgeting for future growth. To assist with reclaiming costs, Data Protection Advisor also creates reports to charge back for infrastructure usage. These can be created automatically based on several metrics such as quantity of data backed up, restored, or retained.

Compliance and risk management

Through realtime views of the entire backup environment, Data Protection Advisor helps users understand potential risks and exposures in data protection strategies across multiple backup products and backup domains. 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 ensure that established backup service level agreements are being met. It also identifies areas of success, providing peace of mind that a system is working, applications are recoverable, and data is safe.

Change and configuration management

While reducing failures and optimizing your resources are a day to day priority, change is the one constant. New systems are added, old systems are expired, capacity is increased, configurations are changed, and software versions are updated.

As Data Protection Advisor captures the success, failure, and performance data from your environment, it also captures configuration information. The same analysis engine that monitors and alerts can track changes to systems, configurations, and software versions, including licensing. This capability allows you to capture and report on system configurations and compare them over time or to a gold standard. When issues arise, you see what has changed in the environment and by whom. During system upgrades Data Protection Advisor can compare the new configuration to a standard or the prior configuration, including backup jobs, system parameters, and hardware configuration—taking the guess work out of setting dozens of parameters.

Analysis alerts and reports

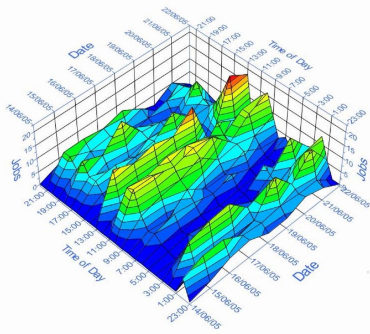
Below is a sample of the analysis alerts available in Data Protection Advisor.

- **Backup not running in backup window:** Know when a backup is running at a time when it might interfere with production systems.
- **Backup significantly slower than normal:** Discover backups that have a much lower throughput than normal.
- **No successful backup for many days:** Identify servers that haven't backed up successfully for some time.
- **Backup going out of SLA window:** Receive alert on backups that need to be rescheduled to meet SLAs.
- **Backup has unsuitable retention:** Flag backups that have incorrect retention periods to meet regulatory requirements (for example, SEC 17a-4).
- **Backup significantly smaller than normal:** Recognize backups that are smaller than expected, pointing to potential issues with backup scheduling.

- **Multiple device failures:** Identify backup servers with more than one backup device unavailable due to failure.

The following is a sample of the reports available in Data Protection Advisor:

- **Backup summary:** Provides a high-level overview of backup operations that can be broken down by any grouping.
- **Report card:** Gives a summary of backups that is ideal for spotting recurring problems that may go unnoticed.
- **Application exposure:** Identifies the time since the last successful backup of multi-server applications and the expected time to restore in case of failure.
- **Backup application activity:** Enables visualization of backup job activity on a day-to-day basis to facilitate load balancing.
- **Slowest backups:** Provides a list of the servers with the lowest throughput rates.
- **Predict media usage:** Extrapolates the daily usage of media to see when more media will be required.
- **Media contents:** Displays details of which backups are on a particular piece of media
- **Expired media:** Provides a list of media that no longer have useful data but have not yet been recycled.
- **Servers not backed up:** Identifies servers that have not been backed up within a given time period.



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

Extending EMC Data Protection Advisor

The core EMC Data Protection Advisor product includes data collection, analysis, and reporting across the data protection environment. This same core product also can be leveraged with new options to monitor, analyze, and report on the performance of your file servers, databases, and VMware® environment.

EMC Data Protection Advisor—File Server option

Today's file servers are a key part of a company's environment, but the increases in complexity and criticality of file servers have not been matched by an increase in visibility of their operations. Many file servers were originally sold as "black boxes," where no user intervention was required. The number of features in today's file servers does not allow a "set it and forget it" approach. Companies therefore need to understand the details of the file server's operation.

EMC Data Protection Advisor—File Server option provides all the information needed to maintain the performance and efficiency of your EMC Celerra® and NetApp file server environment and to enable 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.

EMC Data Protection Advisor—Database option

EMC Data Protection Advisor—Database option provides the visibility required to understand a variety of database environments. It obtains information from Oracle, SQL Server, and PostgreSQL. The software then provides analysis and reports on database configuration, row counts, slow queries, and more to see which areas are overtaxed and growing the fastest. Monitoring and alerting on defined conditions enables proactive management, with resultant alerts sent via e-mail or SNMP. EMC Data Protection Advisor—Database option enables visibility of database configuration and performance so you can maintain and grow database systems and storage efficiently, so you can protect, maintain, and grow.

EMC Data Protection Advisor—Virtualization option

The EMC Data Protection Advisor—Virtualization option collects data from VMware servers and hosted images, enabling tracking of performance, resource consumption, data protection, and conflicting backup job schedules, as well as movement of host images between systems. Now you can obtain the same level of monitoring, analysis, and reporting for your expanding virtual environment with Data Protection Advisor, ensuring the most from your investment.

Support

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
- All NetApp FAS systems running Data ONTAP 6.5.1 or higher

Backup to Disk platforms

- EMC Disk Library 4000
- Data Domain

Database platforms

- Oracle
- SQL server
- PostgreSQL

EMC Data Protection Advisor server platforms

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



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