Micro Focus Adaptive Backup and Recovery Suite

Optimize, Protect, and Analyze Your Backup Environment with Micro Focus® Data Protection Solutions.

Guide

Solution Guide

Business Continuity

MICRO FOCUS®

Micro Focus Adaptive Backup and Recovery Suite

The new digital economy demands an adaptive approach to backup and recovery that can address the dynamic nature of today's 24x7 data center. This approach is expected to handle the diversity and an explosive growth of data that must be protected, and provide a far greater level of business resiliency than yesterday's backup and recovery solutions. It must accomplish all this while also managing increasingly stringent service-level agreements (SLAs), storage growth that is outpacing IT budgets, and emerging new security threats. This new approach requires an innovative way of addressing backup and recovery—one that adapts as it protects at scale, making backup both smarter and more efficient. The Micro Focus Adaptive Backup and Recovery Suite applies actionable insight and operational analytics to optimize backup at all phases of the data protection cycle. Our goal is to give you a 360-degree view of your backup environment to adapt and tune your processes so that they can run optimally at all times.

Key Benefits of the Micro Focus ABR Suite

Improved Business Resiliency and Reliability
- Application-consistent recovery in case of downtime with native application integration
- Fewer error-prone manual steps through advanced infrastructure integrations

Increased Efficiency
- Improved backup and recovery speed by only backing up data that is valuable
- Real-time actionable insight into backup processes including rootcause analysis and remediation

Lower TCO
- File analytics, predictive analytics, and deduplication for better utilization of storage and backup infrastructure
- Centrally managed backup, replication and DR through a unified software and storage data protection solution that is designed, tested, purchase, delivered, and supported together

Introduction

Shifting data center requirements and explosive data growth are forcing today's IT organizations to rethink backup and recovery processes, strategies, and infrastructure. New approaches to deploying IT services such as virtualization and cloud have fundamentally changed how we tackle the challenge of deploying mission-critical applications. In addition, new trends such as mobility, bring your own device (BYOD), and an increasing focus on regulatory compliance have transformed the way we interact with the data we create.

Adding more disk space when running out of capacity, upgrading infrastructure and increasing network bandwidth to improve application performance, keeping all data forever, and running workload-specific backup applications if backup windows expand—form the traditional approach to IT maintenance. These methods are no longer viable in today's environment.

A modern backup solution must not only reliably protect data but must also provide capabilities to analyze, classify and optimize it before it is backed up, then optimize backup processes to create a healthy and efficient environment. Using analytics to derive data insights is key to addressing these challenges. The data backup process itself captures a great deal of information about the data in the backup set. Leveraging this data knowledge can add value to enterprises. Today, firms harness insights from data analytics to deliver personalized customer experiences, streamline business processes, and increase operational excellence. So why aren't we using the same methods to improve one of the most critical IT processes—backup? Operational analytics, which has been an overlooked technology in backup until now, can make data protection processes more intelligent and more efficient, resulting in lower risk, cost, and complexity.

Micro Focus Adaptive Backup and Recovery Suite

The Adaptive Backup and Recovery (ABR) Suite includes a range of solutions that enable an adaptable, smart backup and recovery environment, which can evolve with your business. It enables you to take action in real time, based on insights into your backup data. With an agile, adaptable backup infrastructure, you can confidently deal with the uptime challenges of your business, such as 24x7 operations, continued growth of data, technology disruptions, and increasingly demanding recovery objectives. The suite facilitates a deep, 360-degree analysis of the backup environment and its processes via insights, allowing you to adapt and tune your environment to run at optimum levels.

Products in the ABR Suite

The Micro Focus ABR Suite manages and protects data at all phases of the data protection cycle, all data formats—structured and unstructured, applications, and databases, and environments—physical or virtualized. Utilizing interactive dashboards and operational analytics you

will be able to take action in real time, such as proactively plan for future capacity needs. The goal is to give you tools to adapt and optimize your environment at all phases of the data protection cycle in order to meet your operational and business goals. The ABR suite includes:

- **Micro Focus Storage Optimizer—**for analysis, management and storage tiering of unstructured data based on its value to your business
- **Micro Focus Data Protector—**as the core protection engine for comprehensive, centrally managed backup and recovery
- **Micro Focus Backup Navigator—**for analytics, reporting, and monitoring of data that aids in identifying protection gaps, running rapid root-cause analysis for issues, and planning for future backup resources

The ABR Suite combines unstructured file analysis with automated storage tiering, a core protection engine, and reporting and operational analytics software tools. It delivers an innovative approach based on realtime analytics and optimization and brings clarity and actionable insight into your backup process, which results in reduced cost of backup operations, meeting service-level expectations, and improved productivity.
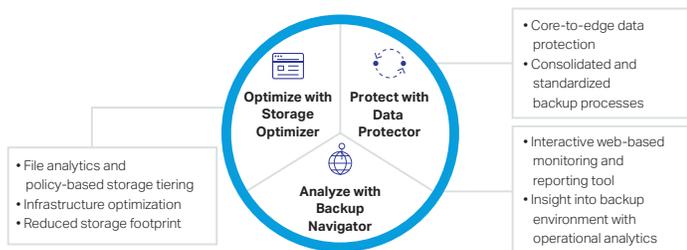

Figure 1. The backup and recovery environment adapts as the cycle of analytics and optimization continues.

Storage Optimizer

To protect applications and growing volumes of data effectively, the backup process must start with analyzing data itself to see if it needs to be protected, and then applying the appropriate protection policies. Perpetual backing up of data that includes hundreds of copies of the same file is wasteful and leads to a shortage of storage capacity. Storage Optimizer combines file analytics with policy-based storage tiering to identify and appropriately tier redundant, obsolete, and trivial (ROT) data so that only the data that is of value to the business is backed up. The result is a reduced volume of data, lower Tier 1 storage footprint, and

decreased cost and complexity of protecting unstructured information. Benefits include:

- **Improved infrastructure management**. Combine file analytics and prioritized data backup to improve data quality, and get greater visibility into data, better infrastructure usage decisions, and more value from your existing infrastructure.
- **Contained costs.** Significantly lower the cost of storage and make more effective use of tiered storage, including the cloud. You can easily identify ROT data stored in Tier 1 infrastructure and move it to Tier 2 to reduce the volume of data.
- **Faster, simpler backup**. Meet recovery point and time objectives (RPO/RTO), shorten the backup window, and increase application performance by reducing the total volume of data being stored.
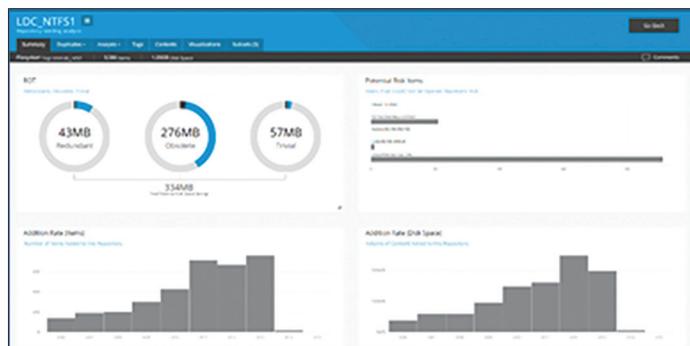

Figure 2. Storage Optimizer clearly identifies business critical and ROT data and automatically moves it to an appropriate tier, reducing risk and costs
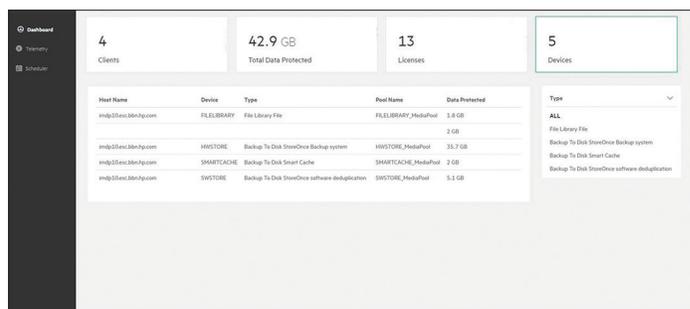

Figure 3. Data Protector is the core data protection engine that provides centrally managed, comprehensive, enterprise-class data protection

Figure 4. Backup Navigator is a reporting and monitoring tool that leverages analytics to optimize the backup environment

Data Protector

Once the unstructured data has been analyzed and managed accordingly, we can back it up—along with the applications—with Data Protector, the core data protection engine which provides centrally managed, comprehensive, and scalable backup and replication across heterogeneous environments. It standardizes and consolidates backup processes so that businesses can reduce cost and complexity of their backup operations delivering improved reliability and business resiliency, and reduced cost and complexity. Data Protector provides:

- **Comprehensive protection.** Centrally manage backup and replication across heterogeneous environments, including physical, virtual, and cloud infrastructures. Protect your application and file system data from core data centers to remote sites, and backup to disk, tape, and cloud targets. Advanced integrations with leading storage arrays enable you to reliably protect and recover large volumes of data without impacting application performance and availability.

- **Advanced virtual server protection.** Integration with multiple hypervisors and advanced backup and recovery options gives you flexibility and control over your virtual environment. Lower the exposure to data loss by automating the time-consuming task of managing and applying protection policies for new virtual machines.

- **Application consistent recovery.** Advanced policy-based recovery options enable you to meet strict recovery objectives and achieve business continuity and compliance. Recover a single file, an application environment, or the entire system to a specific point in time through native integration with enterprise applications and databases.

- **Advanced integrations with HPE Storage and other 3rd party storage arrays.** The combination of Data Protector and HPE StoreOnce appliances, which use the same deduplication engine, helps organizations simplify the management of backup operations across data centers and remote sites and reduce storage cost and footprint. Integrations between Data Protector and HPE 3PAR StoreServ storage arrays enhance the backup and recovery process through the creation, management, and protection of space-efficient snapshots for a wide variety of applications and operating systems. Data Protector also offers integrations with 3rd party storage vendors such as NetApp, EMC, Hitachi and Oracle.

Backup Navigator

With your data now optimized and protected, your backup environment can be analyzed and optimized. Backup Navigator is an interactive web-based reporting and monitoring tool with over 100 out-of-the-box reports, that leverages analytics to identify protection gaps, provides rapid root-cause analysis of backup issues, and enables IT to plan for future backup needs. It graphically presents the content in the form of dashboards, graphs, and charts on backup performance and capacity utilization. By gaining insight into the backup environment, IT can improve resource planning and efficiency. Backup Navigator delivers:

- **Simplified use of Data Protector in multi-cell deployments.** Centrally manage large or geographically dispersed implementations that require more than one Data Protector Cell Manager.

- **Multi-tenant support.** Provide segregated reporting for individual departments in a large enterprise or tenants in a service provider environment.

- **Intelligent dashboards.** Gain instantaneous insights into KPIs of the backup and recovery process from interactive, customizable web-based report dashboards. IT administrators can filter, change, and modify views in seconds.

- **Real-time predictive analytics.** Benefit from visual insight into the backup and recovery process based on daily use, along with trending and forecasting algorithms that reveal future performance, capacity gaps, and requirements. Gain insight into inefficiencies and improve infrastructure utilization. Plan your future storage requirements based on past trends so that you don't run out of storage capacity.

- **Rapid root-cause analysis and problem solving.** Proactively detect and address potential resource conflicts and systematic or systemic issues before they cascade into

outages and data loss. Quickly identify which sessions are failing and with the drill-down function, discover the cause.

- **Flexible, personalized reporting.** Customize reports to match the specific needs of the users who rely on the details to enable decision-making and trigger appropriate actions.
- **What-if scenario evaluation.** Identify current backup and recovery operations whether or not SLAs would remain achievable, identify impacts to the backup infrastructure, and reveal the best ways to balance the demands of new data within the existing infrastructure.

Learn More At
www.microfocus.com/abr
www.micofocus.com/dataprotector
www.microfocus.com/backupnav
www.microfocus.com/storageopt