Datasheet

NetApp SnapCenter

Simple, High performance, Empowering: Enterprise data protection and clone management for ONTAP

The Challenge
Data protection at scale

Protecting data is one of the top concerns of any IT manager. As applications proliferate and the organization grows, managing a diverse IT environment can be a real challenge. This challenge is especially evident for organizations that have application, database, and backup specialists who are required to back up their data but might not be responsible for the storage infrastructure.

For organizations with IT specialists, it is critical to create an environment that allows each function to operate independently and according to its own application workflow. At the same time, these specialists must retain some level of infrastructure control and integrity. It is not easy to achieve this balance with traditional tools and technologies. IT specialists want to have “self-service” autonomy, but they might not have in-depth knowledge of storage systems and backup software. And storage infrastructure administrators want to offload typical data protection tasks to application owners without sacrificing the ability to oversee and regulate activity on the storage systems.

Traditional backup and restore technologies based on streaming data protection devices, such as tape or streaming disk devices that emulate tape, don't use storage-based snapshot technology. As a result, these technologies can be very slow in responding and are resource-intensive. Ingesting large amounts of data is one strength of these devices, but trying to restore or retrieve data is complicated and can take a significant amount of time. As the size of applications and the number of applications increase, complexity goes up significantly because each application can have a different administrator with different needs requiring different schedules and policies. How do you easily manage backups across disparate applications and infrastructures, with delegated management to application or database owners, without sacrificing control or oversight and do it at scale?
Customers who use NetApp SnapManager® products have an intuitive migration mechanism to move to NetApp SnapCenter.

High Performance
SnapCenter is designed to deliver high performance backup and recovery for database and application workloads hosted on ONTAP storage.

Backup and restore performance is largely due to onboard capabilities of NetApp ONTAP storage-based Snapshot technology. Offloading this functionality not only simplifies operation, but also offloads Snapshot functions from the host.

By leveraging the embedded functionality of NetApp ONTAP® storage software to perform space-efficient NetApp FlexClone® management, NetApp SnapCenter also enables greater agility by increasing the performance of testing and development.

Application and database administrators can initiate FlexClone volumes independent of storage administrators through the same GUI console to support highly iterative test and development workflows. The self-service feature of space-efficient cloning reduces testing and development time and puts more capability into the hands of application owners.

Empowering
IT organizations face the challenge of providing self-service capabilities for individual administrators while also retaining oversight and control of the storage infrastructure by the storage administrator. SnapCenter uses RBAC to delegate functionality to application and database owners while retaining oversight and control by a central storage infrastructure administrator. This level of control and security frees storage administrators from tedious tasks that application and database owners can do for themselves. At the same time, such control protects the overall infrastructure from abuse from even colleagues with the best intentions.

As IT organizations continue to grow with the size of the overall business, IT specialists play an important role in the data center. SnapCenter provides application- or database-specific workflows tailored to meet the needs of application, database, and virtualization infrastructure administrators. Because each application or database has a unique workflow, application and database owners find their delegated workflows familiar and well suited to their use models. SnapCenter is also built to be open by offering enhanced REST APIs for the integration of third-party orchestration and cloud management software.

The Solution
Enterprise-ready, easy-to-use data protection
NetApp® SnapCenter® software is simple, unified platform for application-consistent data protection and clone management. This software simplifies backup, restore, and clone lifecycle management with application-integrated workflows. Leveraging storage-based data management, SnapCenter enables increased performance and availability and reduced testing and development times.

Simple
NetApp SnapCenter includes both the SnapCenter Server and individual lightweight application, database, and operating system plug-ins that are all controlled from a central management console. The management console delivers a consistent user experience across all applications or databases. It incorporates an intuitive GUI with visual representations of data copies across the Data Fabric to support critical functions. These functions include job monitoring, event notification, logging, dashboard, reporting, scheduling, and policy management for all application or database plug-ins.

SnapCenter Server also includes Snapshot™ catalog management to facilitate easy rollback to point-in-time copies. SnapCenter Server checks application, database, and OS interoperability and then nondisruptively installs and upgrades software plug-ins on application and database hosts. Those plug-ins can then be managed from the central management console.

In addition, SnapCenter Server enables custom scripts to be executed either before or after common operations such as backup, cloning, and restore by using Perl, Python, PowerShell and REST APIs.
SnapCenter delivers the control and choice needed to enable application and database owners to manage their own environment through RBAC while preserving the integrity of the storage environment. Designed with simplicity in mind for both enterprise and midsize businesses, SnapCenter can accelerate application and database development, preserve data integrity, and simplify management of traditional complex backup and restore processes.

### About NetApp

NetApp is the data authority for hybrid cloud. We provide a full range of hybrid cloud data services that simplify management of applications and data across cloud and on-premises environments to accelerate digital transformation. Together with our partners, we empower global organizations to unleash the full potential of their data to expand customer touchpoints, foster greater innovation and optimize their operations. For more information, visit [www.netapp.com](http://www.netapp.com).

# DataDriven