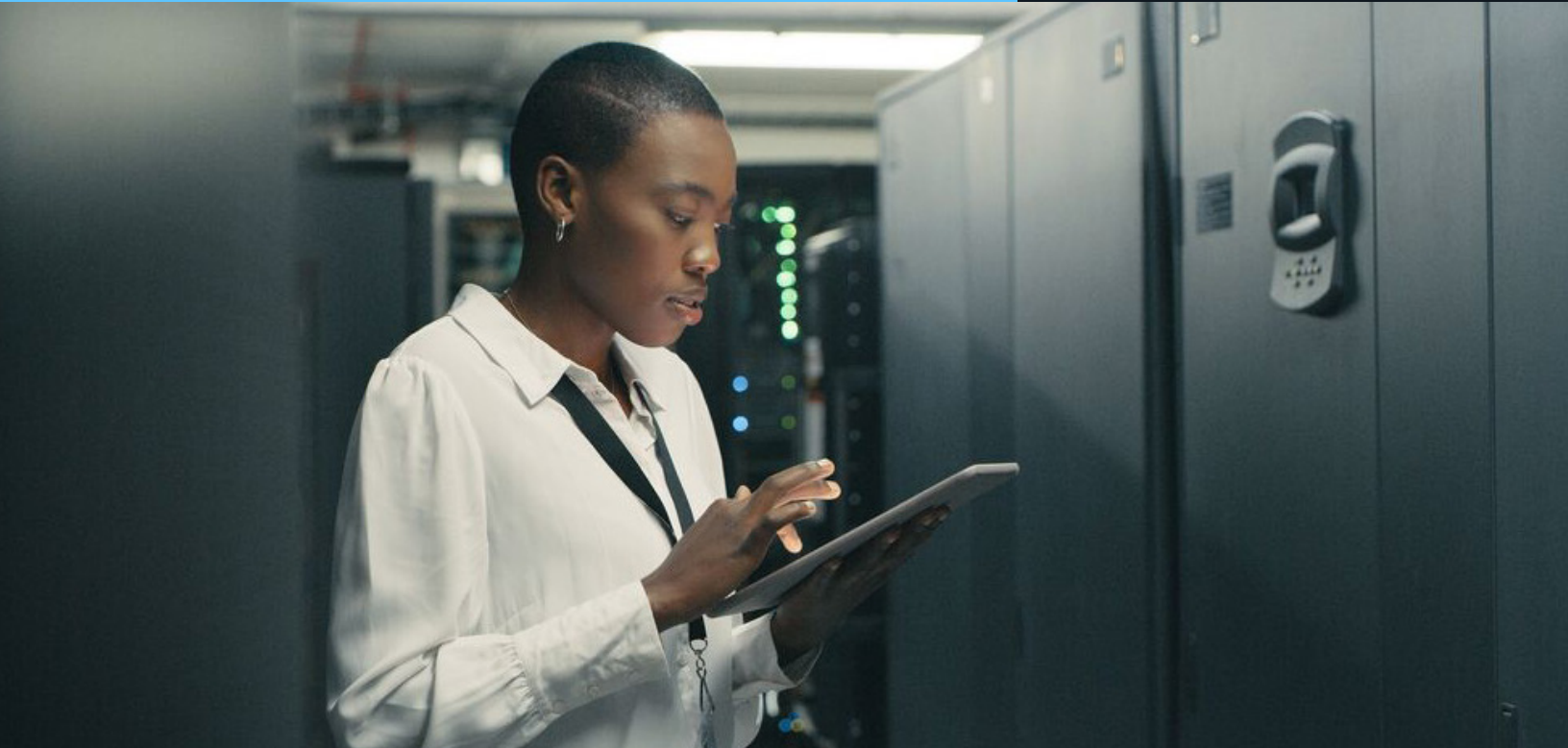


SOLUTION BRIEF

NetApp BlueXP backup and recovery



**The best backup for NetApp ONTAP data,
databases, and virtual machines**

**Protect and archive your ONTAP data using object storage in
the cloud or on premises**

The challenge

Unstructured data continues to explode, creating billions of files for an organization to manage. Furthermore, traditional backup operations require regular full backups, which increase the backup window.

Today's 24/7 uptime environment, increasingly large datasets, and shrinking backup windows mean that current backup solutions inevitably don't match recovery point objectives and recovery time objectives.

All these factors can place demands on your infrastructure and stress on your resources because you have only a limited time to back up your data.

The solution: Introducing NetApp BlueXP backup and recovery.

BlueXP™ backup and recovery is an ONTAP native backup solution that delivers unmatched performance, reliability, and automation.

BlueXP backs up on-premises and cloud-based ONTAP data to object storage. Secure copies of your unstructured data, databases, applications, virtual machines, and Kubernetes persistent volumes are created automatically and backed up directly to cloud in Amazon S3, Azure Blob Storage, or Google Cloud Storage, or on premises to NetApp StorageGRID® object-based storage.

BlueXP dramatically reduces the complexity of protecting data across your NetApp environment, on premises and in the cloud. With BlueXP you can easily enable, manage, and scale to keep your data safe and compliant.

BlueXP backup and recovery offers a fully integrated set of capabilities to implement 3-2-1 data protection simplifying your implementation without the need for specially trained personnel. This includes:

- The ability to create and manage local snapshots, replications to secondary storage and remote backups of all your NAS volumes, your applications and VMs.
- A single control plane for your data protection needs across the entire data estate, including a single recovery console where you can view all your copies and decide how to best restore your data.
- An Indexed catalog of your data and all your local snapshots, secondary ONTAP replications and remote backup copies – allowing you to easily search, view and restore any data you need.

Key benefits

- **Performance.** Back up on a block level, incrementally forever. Preserve NetApp® ONTAP® storage efficiencies, including deduplication, compression, and compaction.
- **Reliability.** Data copies are independent and immutable, and they cannot be modified. The object storage is designed for 99.999999999% (11 nines) of data durability.
- **Automation.** A single control plane for all your data protection needs across the entire data estate, including a single recovery console where you can view all your copies and decide how to best restore your data.
- **Security.** End-to-end encryption with customer-managed key (CMK) support—AES-256 bit encryption at rest and TLS/HTTPS encryption in flight. Private network connectivity between source and destination, with proxy support.
- **Cost efficiency.** Pay only for what is protected and use the lowest-cost storage tiers available.

BlueXP performs block-level, incremental-forever replication and preserves all storage efficiencies. NetApp Snapshot™ copies significantly reduce the amount of data that is replicated and stored, optimizing your bandwidth consumption, and minimizing the performance impact on production to help you meet your SLAs.

Simply put, your first choice for backing up NetApp ONTAP should be BlueXP backup and recovery.



Performance

BlueXP uses block-level incremental-forever technology to achieve backup windows that are 100 times faster than standard NDMP backups, enabling BlueXP to deliver timely and efficient backups at PB scale.

BlueXP preserves ONTAP storage efficiencies, including deduplication, compression, and compaction, saving only changed blocks, which means that you'll never miss a backup window, no matter how demanding the workload.

Additionally, because backups are made to object storage either in cloud (AWS, Azure, or GC) or on premises (StorageGRID) you can achieve unlimited scale.



Reliability

With BlueXP you can easily implement a 3-2-1 backup strategy, which requires 3 copies of the data in 2 different formats with 1 copy offsite in a remote location.

BlueXP stores the backup separately from the ONTAP cluster in an object format. Together with NetApp SnapMirror® data replication technology to create a secondary copy, you can easily complete 3 copies of your data in 2 formats with 1 in a remote location.

Because the backup data is stored separately from the ONTAP cluster, BlueXP backups are independent. Furthermore, by converting directly to object format with no separate bridge, BlueXP eliminates an additional point of failure.

With the backup format as object storage that has 99.999999999% (11 nines) of data durability, BlueXP backups are extremely reliable.



Automation

Backup activation with BlueXP takes only minutes. Operations are intuitive and require no special training.

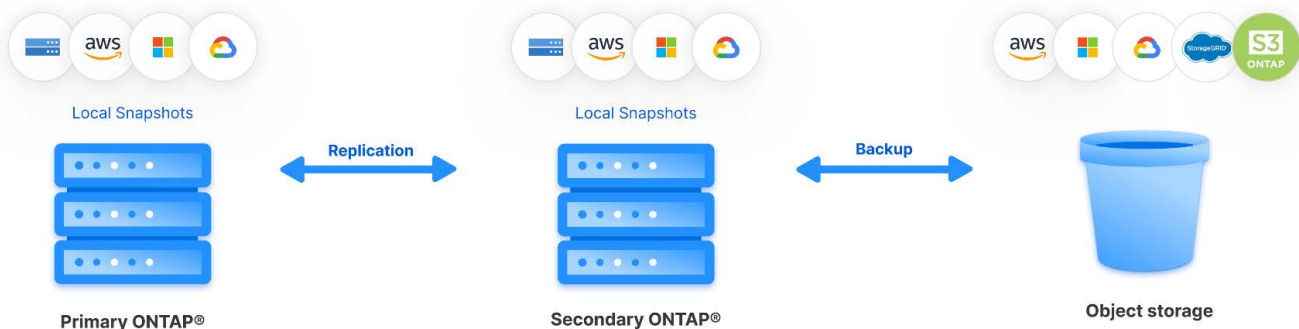
Easily implement a 3-2-1 data protection with the ability to create and manage local snapshots, replications to secondary storage and remote backups from a single control plane.

Because BlueXP is delivered as software as a service, there's no need for complex setup and maintenance.

BlueXP automatically replicates backup policies to new data volumes, which means that you can set it and forget it, knowing that your data is always protected.

Additional features such as an indexed and browsable catalog make it easy to search and restore on a granular level. And you can fully integrate and automate your operations by using the BlueXP API.

BlueXP™ backup and recovery



BlueXP protects cloud and on-premises ONTAP data, applications, databases, virtual machines, and Kubernetes clusters.



Security

BlueXP backups are resilient in protecting against ransomware attacks. Communications are protected end to end with **AES 256-bit encryption at rest**, TLS/ HTTPS encryption in flight, and CMK support.

Also, backups are immutable and indelible, and they are locked and monitored. Attempts to corrupt the data raise alerts.

With BlueXP you can air-gap your backup with multiregion, multicloud, and cross-account operability.



Cost efficient

Because BlueXP takes advantage of NetApp storage optimization and Snapshot technology and stores only incremental block-level changes forever, backup data sizes are very small. This means that your backup costs with BlueXP are some of the lowest in the industry.

BlueXP is so easy to use and the backup footprint is so optimized that you save on both hardware storage costs and staff time for managing your backup services.

With BlueXP pricing you pay only for what is protected, and you can use the lowest-cost storage tiers available.

See the savings for yourself with the [BlueXP backup and recovery TCO calculator](#).

“We rely entirely on NetApp Snapshot technology. The backup is fully automated, integrated with FlexPod, and takes only a few minutes, including replication.”

Christian Grützner, Architect Storage & Backup,
All for One Group

About NetApp

In a world full of generalists, NetApp is a specialist. We're focused on one thing, helping your business get the most out of your data. NetApp brings the enterprise-grade data services you rely on into the cloud, and the simple flexibility of cloud into the data center. Our industry-leading solutions work across diverse customer environments and the world's biggest public clouds. As a cloud-led, data-centric software company, only NetApp can help build your unique data fabric, simplify and connect your cloud, and securely deliver the right data, services, and applications to the right people—anytime, anywhere.