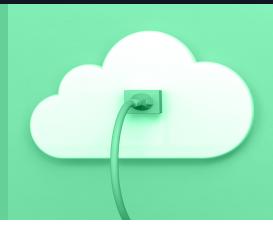
■ NetApp

Solution Brief

Find Your NetApp AltaVault Replacement in NetApp Cloud Backup



Executive Summary

NetApp AltaVault is reaching end of service. NetApp Cloud Backup service is the best NetApp AltaVault replacement.

In NetApp environments with on-premises ONTAP clusters, there was an important need for a product that could offload data securely, efficiently, and quickly. The best solution to meet those demands was NetApp AltaVault. AltaVault made use of deduplication, compression, and encryption to swiftly move data into the cloud at very low costs and with great simplicity. This would hold true, not only for NFS and SMB shares, but also for offloading data from ONTAP volumes using NetApp's SnapMirror technology. AltaVault supports all the leading cloud storage providers—AWS, Google, and Azure.

The NetApp AltaVault architecture made it extremely useful for users. AltaVault could be deployed as a physical appliance or as a virtual machine that you would run on-premises and later also in the public cloud. For years AltaVault has been a leading backup and restore solution. To the regret of many organizations this product will meet its end of life in December 2023. This means Altavault end of support and end of availability are also on their way. Companies that are still using AltaVault will need to find a replacement backup solution.

The main question with respect to ONTAP environments: With NetApp AltaVault discontinued, is there a worthy successor?

Table of Contents

The Challenge	2
The Solution: Cloud Backup Service	2
Cloud Backup Benefits	3
How Cloud Backup Works	4
Cloud Backup Features	5
How Does Cloud Backup Replace AltaVault Functionality?	7
How One Company Transitioned from AltaVault to Cloud Backup	9
AltaVault End of Life Is Coming. Cloud Backup Is the Solution	10

The Challenge

- · Replace your AltaVault backup solution Many users have already begun to do so, but all support for AltaVault ends in 2023. You'll need to find a replacement backup solution by that time or risk letting your data go unprotected. by EOL in 2023
- · Easily back up data to the cloud AltaVault gave users an easy way to backup their data to the cloud. While there are many backup solutions available on the market for backing up data, including Network Data Management Protocol (NDMP)-based tools, not all of these offer the simplicity and integration of a native NetApp service.
- · Create efficient and durable backups Unlike many backup solutions, AltaVault offered a way to efficiently create durable backups. If you don't find a similar solution, your total costs of ownership are likely to increase as your backup creation process will become more time intensive and storage consumptive. No less important: with less efficient and durable backup methods, the chance for data loss increases greatly.
- · Retain the space- and cost-reducing features of ONTAP One of the best things about AltaVault was that

as a NetApp-native tool, it was fully integrated with the rest of the NetApp ecosystem. That meant that cost-saving storage efficiencies that are NetApp's trademark were preserved from the source volume with the backup copies. Using replacement backup solutions outside of NetApp are likely to see your storage costs increase.

The Solution: Cloud Backup Service

NetApp Cloud Backup is a new service from NetApp that creates block-level, incremental forever backups and stores them seamlessly in object storage in either AWS, Azure, Google Cloud, or NetApp StorageGrid appliances. This is NetApp's recommended replacement solution for AltaVault deployments.

Note: This Cloud Backup service is an entirely new offering from NetApp and shouldn't be confused with an earlier alternate name for AltaVault, which was also called Cloud Backup.

Cloud Backup is the Easiest Way to Back Up ONTAP to the Cloud



- 1. Select your ONTAP or Cloud Volumes ONTAP cluster
- 2. Set retention policy and schedule



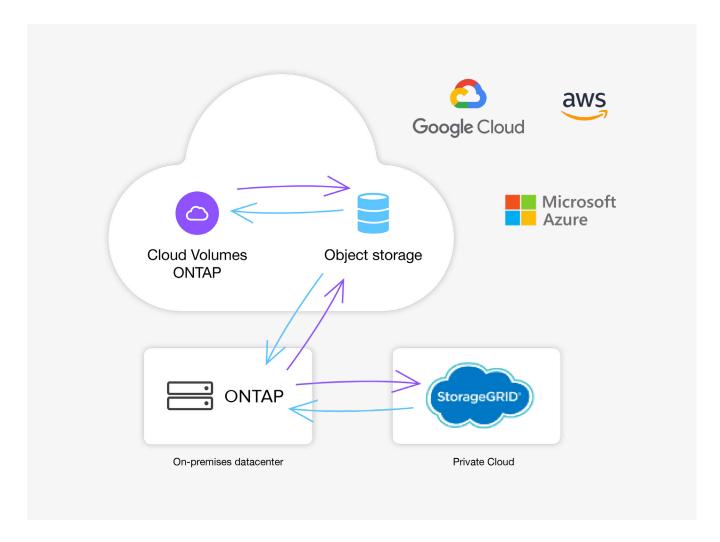
3. Sit back and relax



Cloud Backup Benefits

Protects all your ONTAP data everywhere, both on-premises and in the cloud

- Easy to upgrade from AltaVault to Cloud Backup with Cloud Manager
- Restores your data instantly entire volumes, folders, or even single files
- Block-level, incremental-forever backups ensure you'll never miss a backup window
- Backups reside in object storage in the public cloud or StorageGRID appliances on-prem, keeping costs low
- Preserves all ONTAP storage efficiencies
- Makes complex backups easy with a super simple, set-and-forget interface in NetAPP Cloud Manager™
- Scales limitlessly
- Easily begin your cloud journey



The Cloud Backup architecture

How Cloud Backup Works

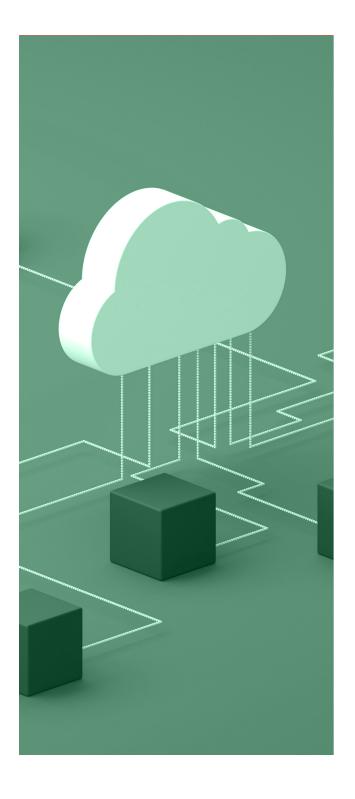
Cloud Backup is the simplest and most effective solution to backup ONTAP data in a native manner. One key component to Cloud Backup architecture will be familiar to any user of AltaVault: SnapMirror®. Like AltaVault, Cloud Backup uses SnapMirror data replication to back up your on-premises ONTAP and Cloud Volumes ONTAP data by creating incremental backups

at the block level that are stored in object storage on AWS, Azure, Google Cloud, or in NetApp StorageGrid appliances.

Cloud Backup copies preserve all of the native ONTAP storage efficiencies that are used in on-premises ONTAP as well as in Cloud Volumes ONTAP clusters, from deduplication and thin provisioning to compression and compaction which can be. That means backups remain space and cost-efficient. Since with Cloud Backup you pay for the amount of data stored, the smaller the footprint the better.

Cloud Backup securely transfers your backups to highly durable object stores from end-to-end, with a minimum footprint.

There is also another benefit for strictly on-premises users of AltaVault: AWS, Azure, and Google Cloud. For companies that aren't already using the cloud, Cloud Backup is an easy and low-intensity way to get started with one of the safest workloads to test out the cloud. For companies with a mandate to move to the cloud as quickly as possible, Cloud Backup can immediately get your data to AWS, Azure, or Google Cloud ahead of much larger and complex application migrations. It doesn't matter which cloud you use if you're moving away from AltaVault: Azure based Cloud Backup is the same as AWS and Google Cloud Cloud Backup. Also, for users who aren't interested in leveraging the cloud, Cloud Backup is fully supported by NetApp StorageGrid systems and the Software only option for secured regions within ONTAP.



Cloud Backup Features



Block-Level, Incremental Forever Backups

Cloud Backup creates block-level backups that are incremental forever. This makes your backup window much shorter and ensures that your backups are consistent with your source data, with less chance of data loss. Block-level backup backs up your data 10 times faster than traditional, filelevel backup solutions, such as those that rely on Network Data Management Protocol (NDMP). Updates only affect changed data, which means less syncing between source and copies.



Fast Restores

With Cloud Backup, restores are fast, with backups directly hydrated by the source ONTAP volume with no proxies involved. These restores take place at the file, folder, or even volume level. By keeping metadata with the backup in the object storage bucket, restores avoid using additional storage for cataloging and indexes. Cloud Backup is also fully integrated with NetApp SnapCenter® to help create applicationaware backups that are crash consistent.



Independent Backups

Because Cloud Backup copies are stored independently from your ONTAP cluster, they offer more dependable protection than volume snapshot copies to recover your data. This is an instrumental part of enabling a 3-2-1 backup strategy.



Preserved ONTAP Efficiencies

All of the deduplication, compression, and compaction that takes place on your ONTAP system are retained in your backup copies. This not only reduces the amount of storage space that you'll consume in object storage, it will also cut down on your transfer time, ensuring backups are quick and effective. This is part of the reason why Cloud Backups take up 97% less network bandwidth.



Security and Governance

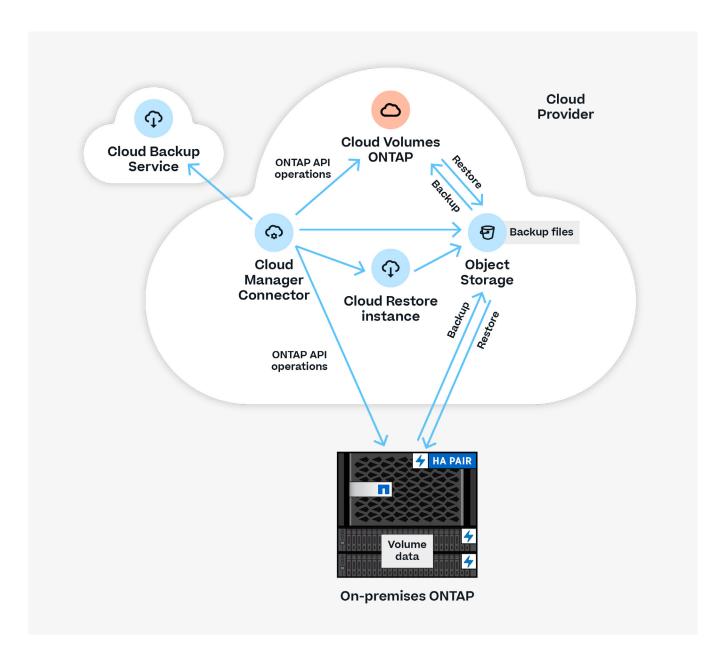
Cloud Backup offers end-to-end security using AES-256bit encryption at rest and TLS/HTTPS security in flight. The connections from Cloud Volumes ONTAP to the object store are based on a private network. And finally, encryption keys, cloud credentials and cloud management is controlled by NetApp.

Cloud Backup also currently comes packaged with a subscription to NetApp Cloud Data Sense, the Al-driven data governance tool that can help you identify sensitive types of data stored in your backups, such as Personal Identifiable Information (PII), which could require higher levels of security.



NetApp Service Integration

Cloud Backup is fully integrated into the entire NetApp ecosystem via NetApp Cloud Manager, the SaaS-based starting point for all NetApp cloud services. Cloud Backup not only works for Cloud Volumes ONTAP, it also integrates with on-prem ONTAP, letting you protect data seamlessly throughout hybrid storage architectures that span both the data center and the cloud.



Cloud Backup is seamlessly controlled via Cloud Manager

These features combine to make Cloud Backup the definitive solution to replace your existing AltaVault deployment. To help you plan, NetApp offers an online calculator to estimate the costs when using Cloud Backup to backup your ONTAP data.



How Does Cloud Backup Replace AltaVault Functionality?

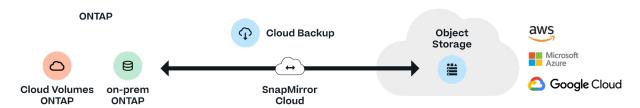
Whether you use ONTAP in an on-premises cluster or in the hyperscale cloud, backups are a must. With AltaVault support and availability ending in 2023, what kind of backup functionality does Cloud Backup offer as a replacement?

AltaVault Appliance (End of Availability)

aws Object Storage



Cloud Backup Service



All of AltaVault's backup functionality is supported by Cloud Backup.

Cloud Backup capabilities include:

ONTAP

A fully multi-tenant service delivered and managed by NetApp

- Where AltaVault was a tool, Cloud Backup is a fully managed service
- One tenant cannot access another tenant's resources
- Tenants are securely separated end-to-end

Creates scheduled backups of your volumes

- Scheduled backups allow you to set and forget
- After a baseline backup, the scheduled backups will be incremental forever

Allows for volume restores as well as single file restores

Next to restoring entire volumes it is possible to restore single files as well with the help of an automatically deployed temporary restore instance

Backup data is stored in object form in the cloud or StorageGrid object stores

Depending on the cloud provider, the object store will be Amazon S3, Azure Blob storage, or Google Cloud Storage.

Integrated into Cloud Manager

- This allows for centralized management and simple provisioning
- Full RESTful and ONTAP API programmatic access

Billed on a metered basis, integrated with the cloud provider billing

This greatly simplifies tracking your costs via the cloud provider's billing tools

Cloud Backup offers long-term, cost-effective protection and disaster recovery, and protects against outages by storing the data in a separate environment from the primary/snapshot copies, which satisfies the 3-2-1 requirement. Also backups can live indefinitely even without a source volume. Like with SnapMirror relationships, you can restore your volume from the object store to a different volume then the origin volume.



See how Cloud Backup works in this video demonstration



How One Company Transitioned from AltaVault to Cloud Backup

To see how the Cloud Backup replacement for AltaVault has already been put in place, let's take a look at how it worked for one NetApp customer.

This major medical company headquartered in the US is leveraging Cloud Backup to replace AltaVault for backing up their on-premises data to the cloud.

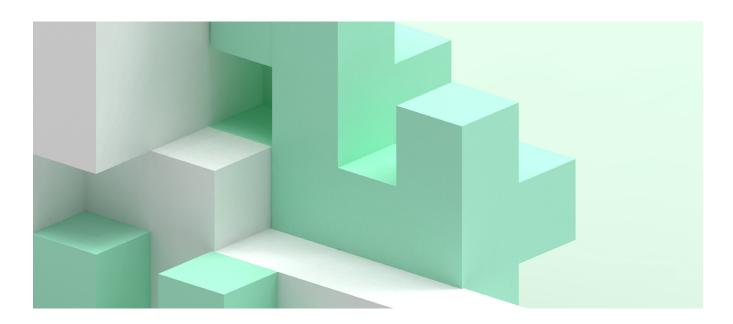
The company regularly stores large amounts of data which would then be used to produce extensive and thorough analytics. To do this, they needed a solution with fast production storage and an integrated, reliable and durable backup method. The stored data needs to be easily and quickly retrievable.

This data is highly critical, as it involved information to improve patient care and treatment plans providing specialists with up-to-date and readily available information. As such, data protection is an essential part of their IT operations.

With AltaVault reaching EOL, the company did extensive research into replacement technologies. They found that Cloud Backup would be the best solution to replace AltaVault's functionality for backing up their onpremises ONTAP data.

The benefits the company gained with **Cloud Backup include:**

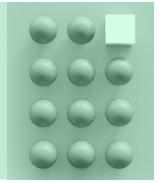
- Storage efficiency reduce backup footprint and costs, with all of the native ONTAP storage efficiencies preserved
- Data stored in the cloud is a fraction in size compared to competitive solutions
- Since backups are much faster there is a lower risk of missing a backup window
- Cloud Backup is fully integrated with Cloud Manager which makes activation extremely easy
- By using Cloud Manager, the company now has direct access to the full range of NetApp cloud services, which they can activate from within the same UI they use to manage Cloud Backup.
- One of the next services of interest is Cloud Data Sense. As the company's data includes patient information, Cloud Data Sense could help locate and categorize files that include personal and sensitive information.

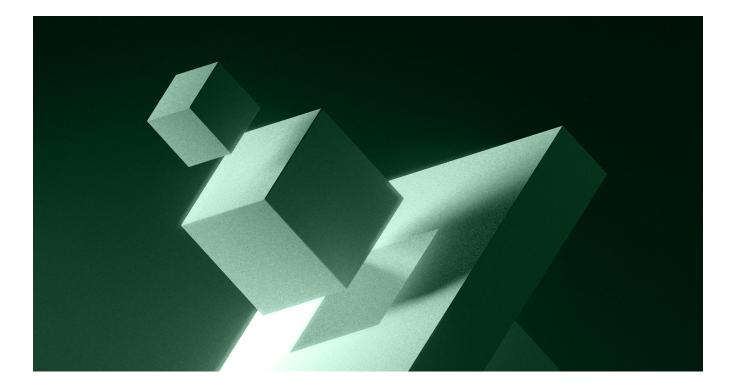


AltaVault End of Life Is Coming. Cloud Backup Is the Solution

AltaVault end of life is rapidly approaching. Cloud Backup is a worthy successor of AltaVault that offers long-term archiving and protection of production data, in a very efficient and secure fashion, for Cloud Volumes ONTAP clusters and on-premises ONTAP clusters. Its configuration and usage is of unparalleled simplicity.

- **SEE YOUR SAVINGS:** Try the Cloud Backup TCO calculator here ->
- **DIY DEMO IT YOURSELF:** a sandbox environment to try out Cloud Backup →
- **WATCH A DEMO:** Check out Cloud Backup in action ->
- **START A FREE TRIAL:** Sign up here to get started with Cloud Backup today ->





Refer to the Interoperability Matrix Tool (IMT) on the NetApp Support site to validate that the exact product and feature versions described in this document are supported for your specific environment. The NetApp IMT defines the product components and versions that can be used to construct configurations that are supported by NetApp. Specific results depend on each customer's installation in accordance with published specifications.

Copyright Information

Copyright © 1994–2021 NetApp, Inc. All rights reserved. Printed in the U.S. No part of this document covered by copyright may be reproduced in any form or by any means-graphic, electronic, or mechanical, including photocopying, recording, taping, or storage in an electronic retrieval system—without prior written permission of the copyright owner.

Software derived from copyrighted NetApp material is subject to the following license and disclaimer:

THIS SOFTWARE IS PROVIDED BY NETAPP "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY DISCLAIMED. IN NO EVENT SHALL NETAPP BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

NetApp reserves the right to change any products described herein at any time, and without notice. NetApp assumes no responsibility or liability arising from the use of products described herein, except as expressly agreed to in writing by NetApp. The use or purchase of this product does not convey a license under any patent rights, trademark rights, or any other intellectual property rights of NetApp.

The product described in this manual may be protected by one or more U.S. patents, foreign patents, or pending applications.

RESTRICTED RIGHTS LEGEND: Use, duplication, or disclosure by the government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.277-7103 (October 1988) and FAR 52-227-19 (June 1987).

Trademark Information

NETAPP, the NETAPP logo, and the marks listed at http://www.netapp.com/TM are trademarks of NetApp, Inc. Other company and product names may be trademarks of their respective owners.

NA-000-0621