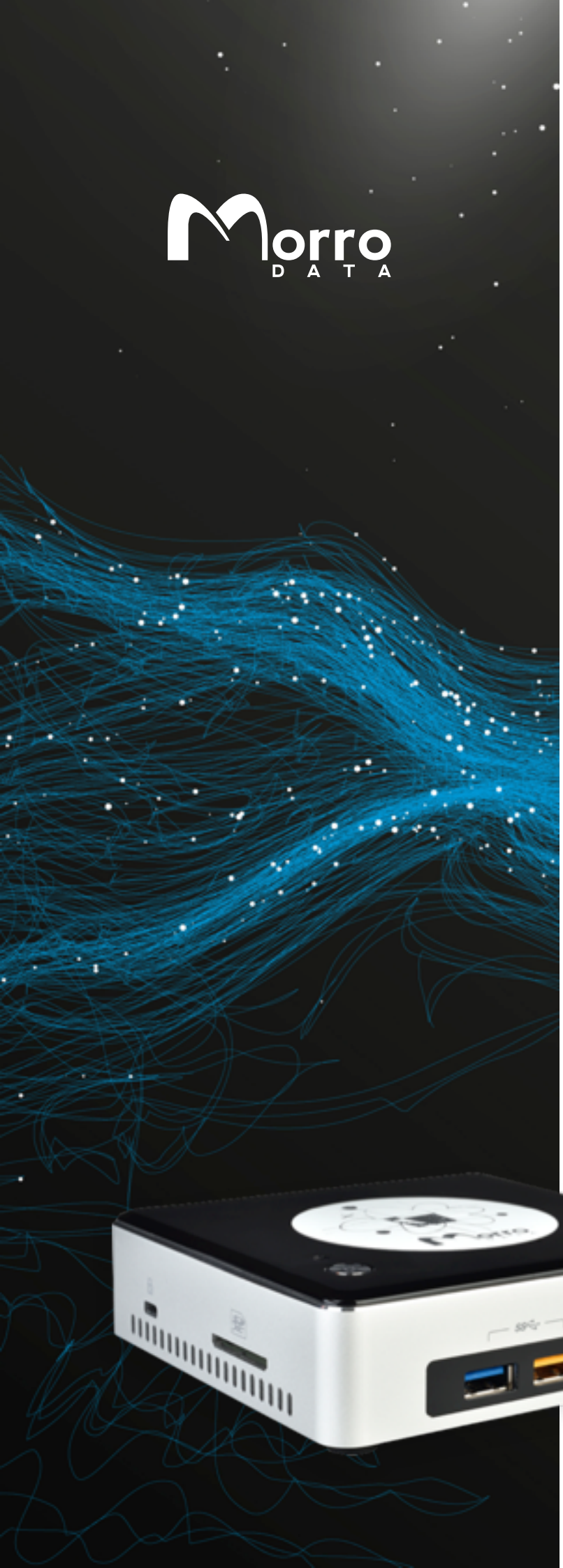
Morro DATA

CLOUD STORAGE: IT'S NOT JUST FOR BACKUP ANYMORE.

How Cache and Sync lets you keep your local file server performance while moving your primary file server to the cloud



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BARRIERS TO MOVING I.T. TO THE CLOUD

SPEED / LATENCY ISSUES

60%

BANDWIDTH REQUIREMENTS

58%

LACK OF CONTROL OVER INFRASTRUCTURE

52%

RISK OF SECURITY BREACH

52%

SOURCE

www.spiceworks.com/marketing/reports/it-cloud-services/

INTRODUCTION

Most organizations consider an on-premises network-attached storage (NAS) device as the cornerstone of their storage and backup strategy. While NAS devices have served organizations well over the years, they also come with a number of serious drawbacks: hardware is expensive, prone to failure and difficult to access from outside the local network.

As a result, organizations have looked to adopt the cloud. The cloud is robust, available from anywhere, and billed as a service. However, even with all the benefits of the cloud, many on-premises users are unable to move to the cloud – either due to a requirement for high performance access to their data, or because their IT infrastructure and services rely on local file server interfaces.

Because of these problems, organizations relying on their NAS are unable to adopt the cloud as their primary file server. At best, they can employ cloud storage exclusively for backup purposes, thereby making the cloud an additional infrastructure to maintain – without the ability to leverage the true benefits of cloud-based storage.

This guide will discuss how a new technology enables organizations to maintain the benefits of having storage on their local networks along with fast access and local drive interfaces, while allowing them to leverage all the benefits of the cloud: maximizing data reliability, availability, and security.

1 / CLOUD STORAGE: NOT JUST FOR BACKUPS

// WHY DO ORGANIZATIONS RELY ON CLOUD STORAGE FOR THEIR BACKUP BUT NOT AS THEIR PRIMARY FILE SERVER?

Organizations of all sizes have embraced the cloud as an essential component of their backup strategy. Cloud backup solutions deliver an affordable off-site storage solution with anytime, anywhere access that businesses need.

Despite the inherent advantages the cloud provides for backup, few organizations have extended that affection to also include the cloud for their primary file storage. The reason is that all cloud interaction occurs by virtue of a synchronization service that relies on existing cloud protocols, which are plagued with speed and performance issues. As a result, latency, bandwidth, establishing a connection, and maintaining a connection are all challenges and points of failure for accessing data sets from the cloud.

USAGE OF CLOUD-BASED IT SERVICE

2 / SOLVING THE CLOUD PERFORMANCE CHALLENGE

High latency, low bandwidth, and poor network connections pose consistent problems to successful interaction with the cloud. Luckily, these performance challenges can be resolved by utilizing an interface that negotiates all cloud interactions in the background with no further user interaction necessary. Morro Data's Cache and Sync technology does exactly that. It handles the synchronization with the cloud, removing the points of frustration users face when interacting with a cloud service. Cache and Sync handles any issues with cloud communications and even continues to provide access to local files when Internet connectivity is lost.

BUILT FOR LOCAL PERFORMANCE

The Morro Data CacheDrive provides a local presence for data by storing parts of the file system locally on a network file server appliance. Users connect to the drive with an SMB protocol and are presented with their entire file system.

Morro Data's Global File System then manages the interactions to propagate new data to the cloud and retrieve existing data based on how users are interacting with the file system. This eliminates the need for users to interact directly with the synchronization service. Instead, users can manage files in the same manner as with an on-premises NAS device.

SUPPORT FOR FILES OF ALL SIZES

Large files and large volumes of files pose challenges when using the cloud. Problems with latency, bandwidth, and connections are multiplied with larger file sizes or higher numbers of files.

The Morro Data CacheDrive manages all of this complexity seamlessly in the background. Using a drive letter interface, the user simply drags and drops files into the CacheDrive. Once the file copy is complete, Morro Data handles the synchronization; the file is sent via the proprietary synchronization service, the Morro Sync Engine, and managed in the cloud.

SMB PROTOCOL

DRAG AND DROP FILES

FILE SIZES: UP TO 4TB

NUMBER OF FILES: MILLIONS

3 / ONLY PAY FOR WHAT YOU NEED

With traditional on-premises NAS storage, the organization needs to guess at how much storage will be needed over the next few years. Some will over purchase, and have wasted their limited budget for way more storage space than they will ever need. Others will under purchase, and as the disks begin to get full, performance dips and the risk of failure spikes. Then, they have to buy all new disks, and at the risk of never letting the problem happen again most will over purchase at that point. Either way, it's a guessing game with negative consequences.

With Morro Data, CloudNAS is infrastructure as a service. Organizations only pay for what they use – and as their storage needs grow, they can elastically scale their storage environment seamlessly. No new disks. No RAID calculation to determine raw versus available capacity. No headaches. Just storage and backup that fits their needs. And it's already off-site, so it satisfies their disaster recovery requirements too.

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CLOUDNAS IS INFRASTRUCTURE AS A SERVICE. ORGANIZATIONS ONLY PAY FOR THE DATA THEY USE

CHAPTER 4 /

CloudNAS ENHANCES YOUR BUSINESS' EFFICIENCY

YOUR DATA EVERYWHERE IN REAL-TIME FOR EVERYONE

The Morro Data Global File System uses Cache and Sync technology to provide users access to their data from any location without the need for a VPN or third-party sync software. The Global File System is a single file system namespace where users can see all their files in their file server, from any location, without having to sync those files onto their local network.

WITH THE GLOBAL FILE SYSTEM, ORGANIZATIONS BENEFIT FROM:

FILE SYNCHRONIZATION ACROSS MULTIPLE OFFICE LOCATIONS

CLOUD-BASED FILE SHARING AND COLLABORATION AMONG EMPLOYEES

FILE SYNC ACROSS MULTIPLE DEVICES

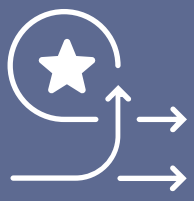
WEB ACCESS TO FILES

INTEGRATION WITH OTHER ON-PREMISES HARDWARE

YOUR PRIMARY STORAGE IS YOUR BACKUP

By moving the primary file server to the cloud, IT departments can leverage the reliability and serviceability of the cloud.

MORRO DATA CLOUDNAS PROVIDES THE FOLLOWING BENEFITS:



NO CRITICAL HARDWARE MAKES DISASTER RECOVER EASY.

IF A CACHEDRIVE FAILS, SIMPLY REPLACE IT AND YOUR FILE SYSTEM IS AVAILABLE IN SECONDS.

A 3-2-1 BACKUP STRATEGY IS EASILY ACHIEVED BY CONVERTING THE EXISTING LEGACY NAS TO AN ARCHIVE.

THE DATA CENTER STORES FILES ACROS MULTIPLE LOCATIONS AND MULTIPLE DEVICES.

ROBUST SECURITY WITH CENTRALIZED IT ADMINISTRATION FOR ALL USER ACCOUNTS AND FULL CONTROL OVER ACCESS RIGHTS.

ADVANCED STORAGE FEATURES INCLUDING VERSIONING, FILE ENCRYPTION IN TRANSIT OR AT REST, COMPRESSION, AND DEDUPLICATION.

MORRO DATA IS THE BEST OF BOTH WORLDS

a. CloudNAS combines the local gigabit performance of a NAS with the reliability, accessibility and scalability of the cloud.

b. The Morro Data CacheDrive provides local network access performance, a simple drive letter interface and access to all files through a non-critical hardware interface.

c. The Global File System is a centralized file view via a real-time sync engine in the cloud. No need for a VPN or third-party sync software.

d. Morro's Storage is cloud-first, providing infinite capacity where you only pay for the data you use and letting you elastically scale your storage environment seamlessly.

e. Cache and Sync solves the cloud performance challenge by handling the synchronization with the cloud, removing the frustrations of high latency, low bandwidth, and poor network connections.

f. Connect multiple offices in different locations so users have access to their files everywhere in real-time.

WANT TO KNOW MORE ABOUT HOW MORRO DATA TRANSFORMS YOUR NAS TO CLOUDNAS?

REQUEST A DEMO

www.morrodata.com