

# 10 Point Checklist for a Modern File Data Platform



**"File storage and backup in its myriad forms, legacy storage boxes, traditional hardware attached inelegantly to the cloud — all of these technologies are going the way of the fax machine."**

Andres Rodriguez, CTO and Founder, Nasuni



## Introduction

The traditional file storage silo is dead, and the era of the file data cloud has begun. Although this change has been in the works for more than a decade, organizations can no longer afford to hold on to the old ways of storing, protecting, and sharing file data — it is too complex, too expensive, and, in the age of ransomware, far too risky.

Today, given the solutions available on the market, large enterprises deserve scalable, cost-effective, opex-based data services solutions that can be deployed on-demand at any location, from anywhere in the world. A file data cloud built around a global file system transforms your IT infrastructure and operations while offering numerous advantages to your business overall.

These include:

1. Reduced long-term file storage infrastructure costs
2. Easy-to-deploy global infrastructure
3. Business continuity in the face of ransomware
4. High-performance, consistent file sharing and collaboration
5. Simplified storage management

This last point cannot be emphasized enough. An optimal file data cloud is designed around a global file system that centralizes the hub in the cloud, then connects to each location around the world through that cloud-based center. This hub-and-spoke architecture simplifies IT operations and infrastructure in a way that was previously not possible.

The aim of this e-book, which is intended for IT and business leaders, is to provide you with the basic knowledge and background needed to confidently evaluate solutions for your organization. I hope to help you understand what you should look for — or even demand — as you build your own file data cloud.



## About the Author

Andres Rodriguez is the founder and CTO of Nasuni Corporation. He was previously the CTO of the New York Times, and founder and CEO at Archivas, creator of the first enterprise-class cloud storage system. In 2008, he developed the first cloud-native global file system and launched Nasuni, a company designed to disrupt the enterprise storage and backup markets. Today, Nasuni manages more than 27 billion files across 40,000 locations and is the file data platform of choice for some of the largest organizations in the world.



# 10 Point Checklist



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# POINT 01

“Your global file platform **must be portable at scale** and allow you to move a PB-sized file system without disrupting your end users or incurring an outage.”

## Multi-Cloud Portability & Interoperability

**As the market shifts away from traditional storage providers,** you do not want to remain anchored to any solution — or any cloud provider. Your file data platform must be:

 Scalable     Portable     Interoperable

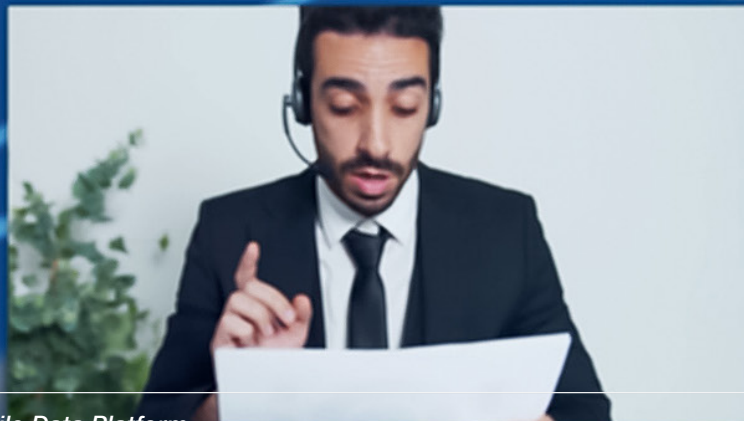
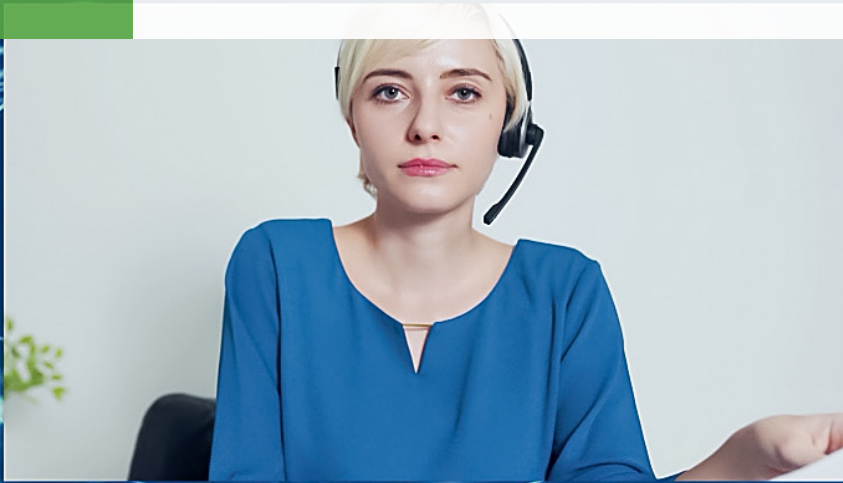
The first point should be obvious, yet many so-called cloud solutions do have surprising scale limitations. This should be a red flag: No solution that is truly architected for the cloud should have limits. Your global file system must also be portable at scale, and allow you to move a PB-sized file system without disrupting your end users or incurring an outage. Finally, you should be able to work with multiple clouds as the need arises, maintaining footprints in each hyperscale cloud simultaneously, in a seamless fashion, or leveraging the services of one cloud while your data resides in another.

# POINT 02

“Organizations deserve **scalable, cost-effective, high-performance data services solutions** that can be deployed on-demand at any location, from anywhere in the world.”

## Scalable Collaboration

**Your file data cloud should make it easy to share large volumes of sizable and complex files dynamically across and between physical locations.** This is one of the features that distinguishes a global file system from solutions like Dropbox and Box, which are not built to facilitate the sharing of heavy file payloads across sites. A global file system accelerates global collaborative workloads, enabling reliable, consistent multi-PB file synchronization across locations.



# POINT 03

“Backup might protect your data, but **it does not protect your business**, or your job.”

## Ransomware Resilience

**The persistent threat of ransomware, and the devastating effects of distributed ransomware attacks have revealed an unsettling fact.** Backup might protect your data, but exposing your organization to extended recoveries that can stretch to days or weeks does not protect your business, or your job. If your organization is hit by ransomware, and you rely on backups to recover, then you will have to rebuild the file servers at each site before restoring normal operations. These restores happen in sequence, not simultaneously, so locations are subject to extended downtime.

A file data cloud based on a global file system architecture centralizes data in the cloud and caches frequently accessed files at the edge. The cloud is the logical central data store — not the individual sites — so if ransomware does strike, and you need to restore back to previous, unencrypted versions of files, the only data that needs to move is the data that was cached based on user activity. Restoring from traditional backup requires that you physically move all the data, but with a global file system, only the most currently used data moves. As a result, you can restore healthy versions of files and resume normal business operations very quickly — often within an hour of the original detection of the attack.

# POINT 04

“A file data cloud also offers more fundamental levels of protection.”

## Strong Data Protection

**The ransomware resilience and rapid recovery capabilities of global file systems hinge on automatic, continuous file versioning to the cloud.** This novel approach to data protection eliminates the need for separate backup software and has proven popular with IT administrators because it requires so little oversight and maintenance.

A file data cloud also offers more fundamental levels of protection. As we look at the services deployed on top of the cloud, it is easy to overlook the fact that the cloud itself is making multiple copies of each file. In traditional file systems, this sort of operation required a lot of work, added tremendous complexity and expense, and it had to be monitored and managed. The cloud has automated replication, and it all happens in the background.



## POINT 05

“A global cloud file data platform uses **the most cost-effective** storage medium to deliver capacity.”

# Superior Economics

**The file data cloud movement would not be where it is today if it did not offer such compelling economics.**

Solutions providers and partners can espouse the benefits of a new technical architecture all they want, but organizations want value. A purpose-built file data platform designed around a global file system unifies functions that have long been delivered by different vendors. Storage, data protection, file sharing, and other key functions can all be delivered through a single platform from one vendor, and this consolidation leads to tremendous cost savings.

Furthermore, lift-and-shift solutions from traditional NAS (Network-Attached Storage) vendors and offerings from the cloud hyperscalers do not scale cost-effectively. A global file data platform uses the most cost-effective storage medium to deliver capacity, then fronts the centralized data store with edge caches at various locations that are optimized for performance. Instead of deploying expensive hardware all around the globe, you end up shrinking your infrastructure footprint by switching to small edges at your sites, all of which feed off the same durable, low-performance core in the cloud. You push scale and capacity from the edges to the cloud, leveraging the economic advantages of the object store without sacrificing performance.

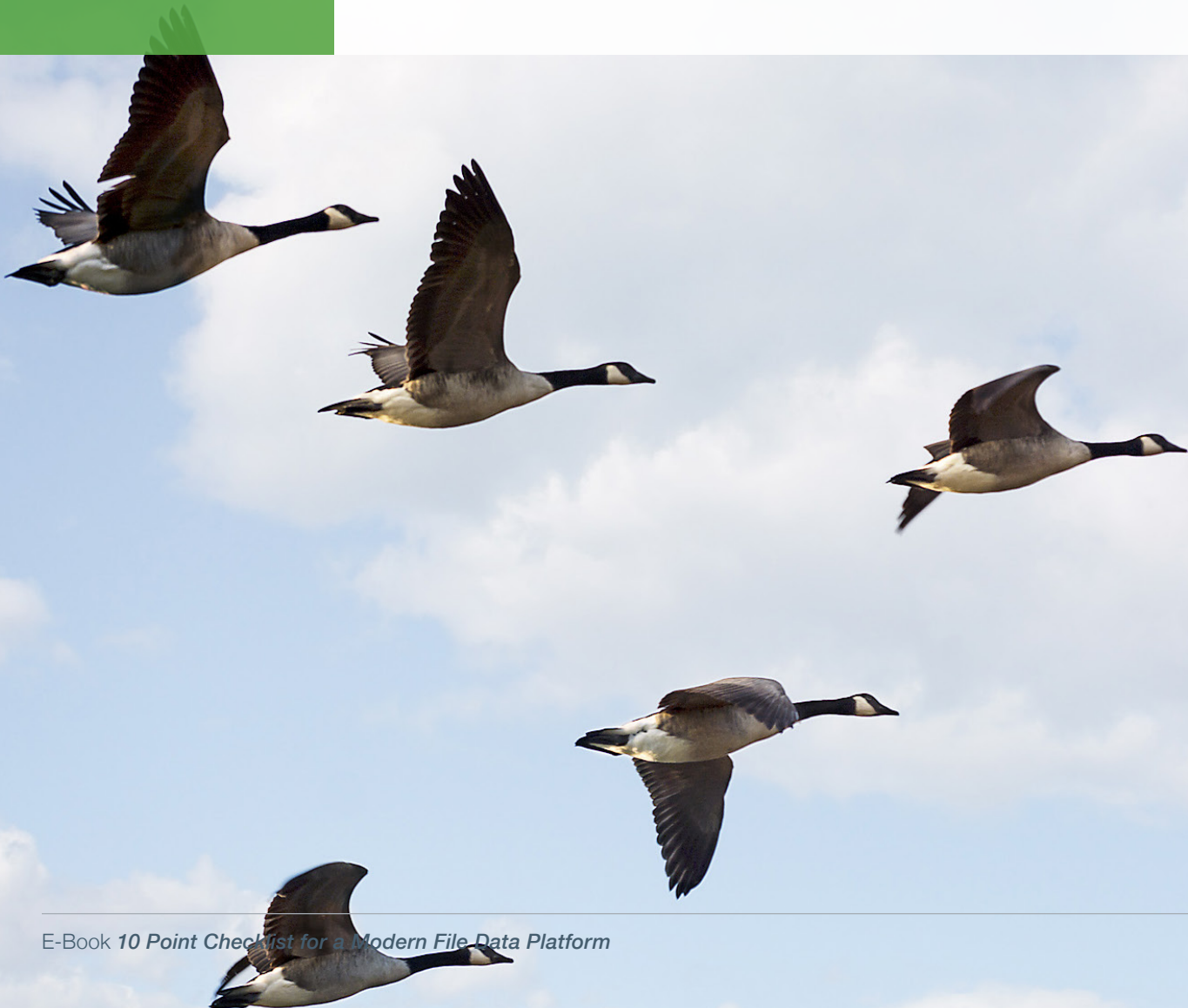


# POINT 06

“Your file data cloud provider should offer an **efficient way to move all that data**, even at the multi-PB scale.”

## Painless Migrations

**Although the file data cloud is a completely innovative approach to storing, protecting, and sharing file data, the transition should be painless.** Edge caches can be deployed as virtual machines on your existing infrastructure, allowing you to upgrade to a global file system without overhauling your hardware. Whether you are operating a handful of sites or hundreds of global locations, your file data cloud provider should offer an efficient way to move all that data, even at the multi-PB scale, to the new cloud infrastructure without disrupting normal business operations.

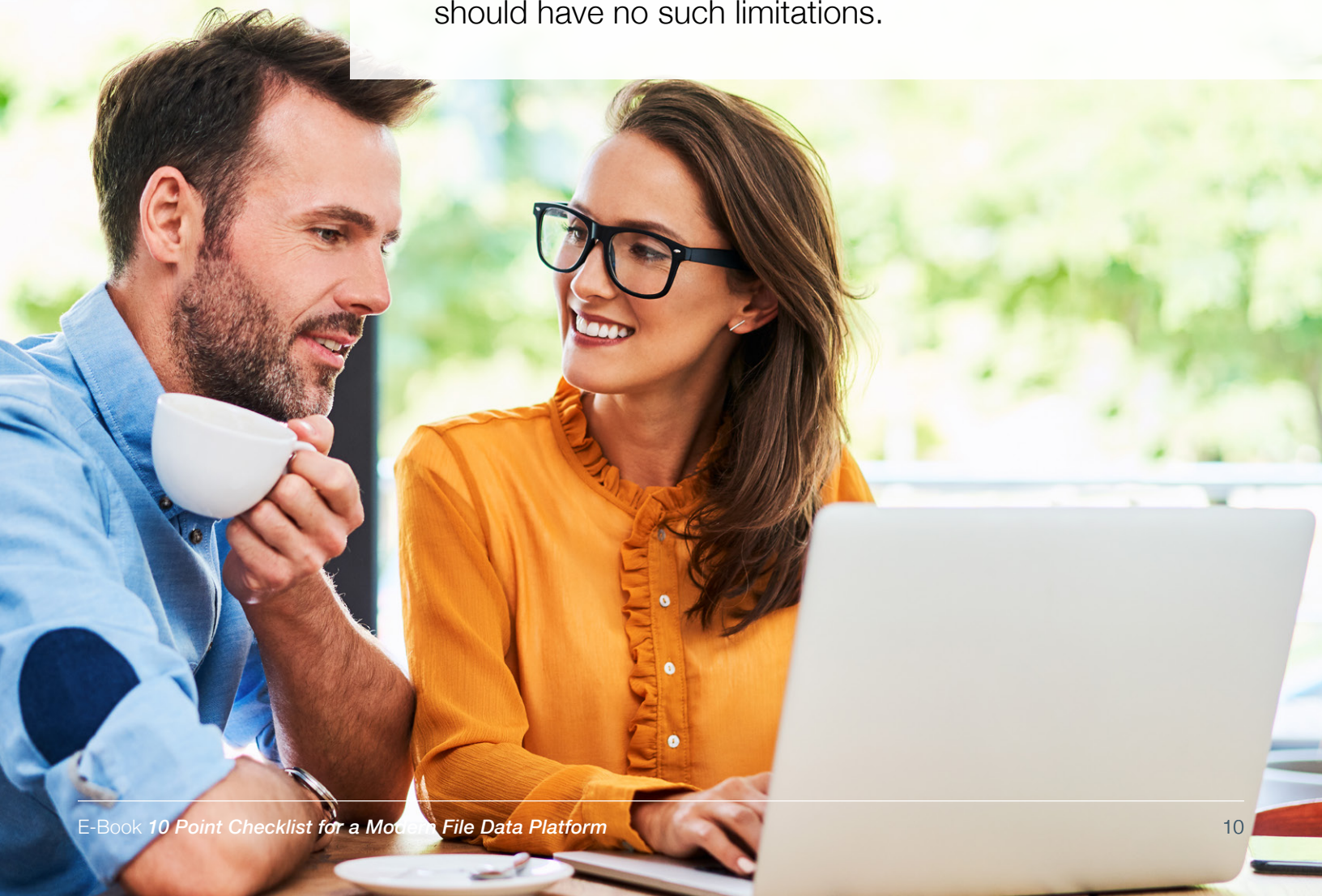


# POINT 07

“Access should be available anywhere, whether your end users are on the road, at a job site, or working on an offshore oil rig, and there should be no exceptions.”

## Hybrid Workplace Optimization

**The office has changed.** Your file data cloud needs to support people working from home, the office, in a café, and offline, and it must offer new models and alternatives for connectivity that do not center around the traditional office. Access should be available anywhere, whether your end users are on the road, at a job site, or working on an offshore oil rig, and there should be no exceptions. These capabilities should extend from standard office documents to the large, complex files that create problems for traditional file sharing and collaboration software. Your file data cloud should have no such limitations.



# POINT 08

“As more people work remotely or take a hybrid approach, many companies have opted for an **entirely cloud-based architecture.**”

## All-Cloud Architecture

**As the global pandemic ushered in a new era of supporting employees wherever they live or work,** many companies have opted for an entirely cloud-based architecture, in which the caching edge appliance runs in the cloud, close to the cloud-based file data store. This must be high-performance, as end users will not tolerate slow access, but today’s cloud technology, combined with a well-architected global file system, makes that possible.



# POINT 09

“As the suite of available cloud analytics tools **expands and advances**, you need to be able to take advantage of them.”

## Access to Intelligent Services

**When you centralize your file data in the cloud**, you should have the option to tap into the cloud analytics tools and business intelligence services that are built to work at scale. To remain compliant with GDPR (General Data Protection Regulation) for example, you should not have to scan individual file servers at every location. Instead, you should be able to scan the consolidated global file system in the cloud with cloud-native tools and perform a GDPR analysis in a much more cost-effective manner.

These tools are incredibly useful. Advanced search and image recognition capabilities make it easier for your users to find older files or volumes that might be relevant to new projects — anything from 3D CAD models to sales pitches. As the suite of available cloud analytics tools expands and advances, you need to be able to take advantage of them to offer more to your end users and your business.

# POINT 10

“You can spend more time and effort on programs and initiatives that **drive the business** (and your career) forward.”

## Support for Business Growth

**Previously, acquiring a new company with one or more locations was a headache for IT, and for the newly acquired operation.** Files and, by extension, file systems are the largest mass in any data center and the hardest to move. In the past, it took far too long to give new locations access to company files because of this data gravity. Organizations turned to expensive replication technologies that required copying data from one critical location to another overnight. This increased storage costs and had to be actively managed. Companies that had a strategy of offering seamless client service from any office or planned to grow using distributed project teams or partners were especially vulnerable to the problems of siloed, isolated file shares.


With a modern file data cloud, you do not move massive amounts of data. You simply provide the new location(s) with access to the global file system in the cloud. The local high-performance edge cache then efficiently fills in based on the site's needs. The integration is fast, simple, and seamless, and your company can accelerate its ROI (Return on Investment) after an acquisition.

In a unique way, a file data cloud should positively impact the business through its effect on IT. Since you no longer need to concern yourself with the mundane operations of replacing disks, expanding file servers, backing up file data, and other time-consuming drudgery, you can focus on more strategic, high-value work. You can spend more time and effort on programs and initiatives that drive the business (and your career) forward.

## Conclusion: An Essential Strategic Shift

Organizations that choose not to pursue a file data cloud will face rising costs, lost economies of scale, lower information-sharing efficiency, and a general drag on global growth. They will expose themselves to unnecessary risk by relying on traditional data protection schemes like backup, which impose extended recovery periods and lead to potentially catastrophic business losses.

Backup in its myriad forms, legacy storage boxes, traditional hardware inelegantly attached to the cloud — all these technologies are going the way of the fax machine. Traditional storage and backup are dead. The era of file data services has arrived, and organizations that delay this strategic shift are putting themselves at a competitive disadvantage. Today's businesses need to support a remote, shifting workforce; accelerate collaboration between distributed teams; extract as much insight and information from their enormous and growing volumes of unstructured data; and constantly justify IT expenditures to executive leaders looking to reduce costs in an uncertain and ever-changing global economy.



How will you build  
your file data cloud?



### ABOUT NASUNI CORPORATION

Nasuni is the leading hybrid cloud storage solution that powers business growth with effortless scalability, built-in security, and fast edge performance using a unique cloud-native architecture. The Nasuni File Data Platform delivers operational excellence by consolidating NAS and backup, eliminating data silos, and making management easy and flexible without changes to apps or workflows. Its built-in security offers proactive defense and rapid recovery, lowering organization's risk from the detrimental effects of ransomware attacks and other disasters. Synchronized access to file data everywhere ensures user productivity by supporting remote and hybrid work. For more information, visit [www.nasuni.com](http://www.nasuni.com).