

# SoftNAS Cloud<sup>®</sup> Platinum Edition

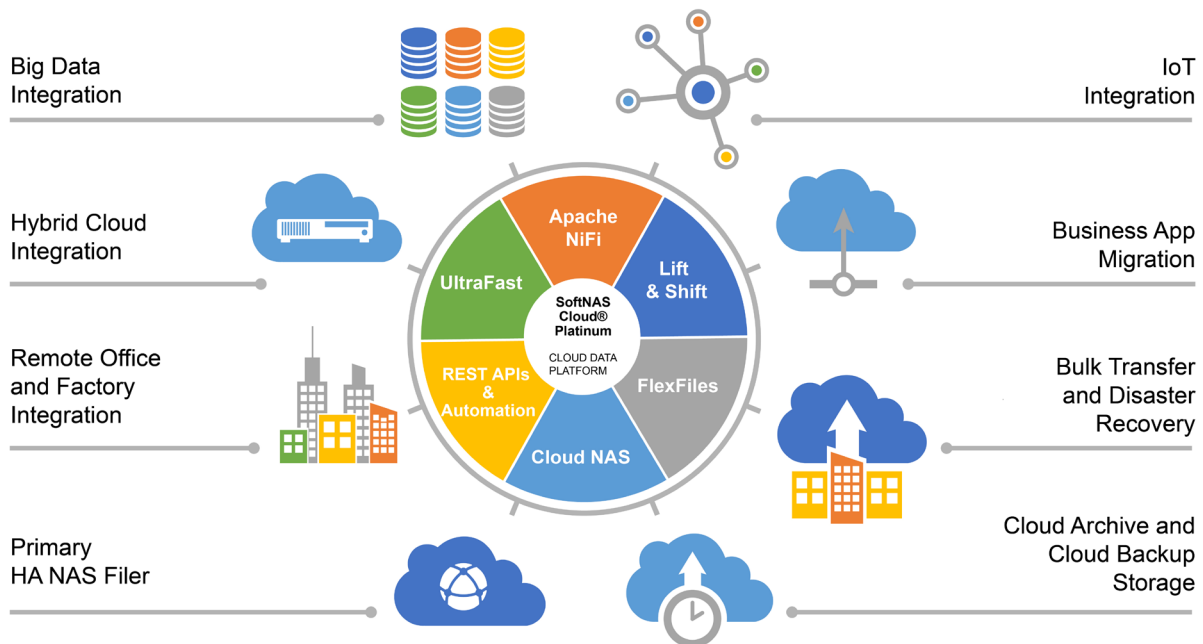
- Cuts public storage costs up to 67% through auto tiering and native support for both block and object storage on AWS and Azure
- Accelerates data migrations and global data transfers up to 20 times faster than using standard TCP/IP

SoftNAS Cloud<sup>®</sup> Platinum is a fully-integrated cloud data platform used to control, manage and move any kind of data to the cloud. It acts as a high-speed data onramp for companies with hybrid/multi-cloud deployments and has powerful configuration and customization capabilities to optimize price, performance, and security on a project by project basis. SoftNAS Cloud Platinum cuts public storage costs up to 67% through auto tiering and native support for both block and object storage on AWS and Azure. It accelerates data migrations and global data transfers up to 20 times faster than using standard TCP/IP. Use it to move live, production data volumes at maximum speeds, providing dedicated and extreme performance with guaranteed reliability SLAs. SoftNAS Cloud Platinum includes all the functionality found in the other two editions of SoftNAS Cloud<sup>®</sup>.

## FEATURES

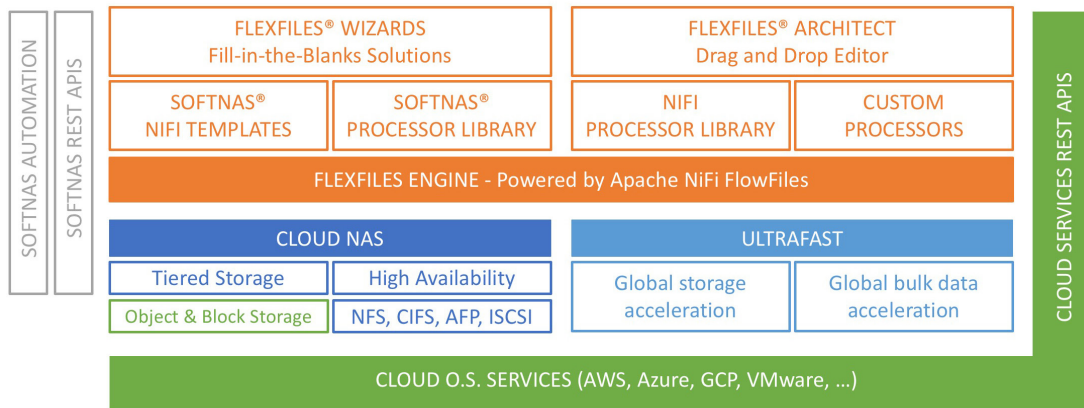
- High Speed Data Transfer
- Auto Tiered Storage
- Lift and Shift File Migration (powered by Apache NiFi)
- Cloud Data Management Environment for DevOps and Administrators
- Cloud NAS - Enterprise-grade, Virtual, Software only
- Includes Features of Apache NiFi

### Integrated Global Cloud Data Platform with High-Speed Data Transfer



Data is the DNA that makes every business unique and is one of the most valuable assets a modern, automated business owns today. SoftNAS believes every business needs a powerful, flexible way to fully leverage their data DNA with the cloud fast and cost-effectively. Unfortunately, IT struggles with ever increasing amounts of data and incompatible file formats being generated from a growing array of traditional and non-traditional sources – including IoT. Through the CloudFabric™ components that define the SoftNAS Cloud Platinum product architecture, SoftNAS addresses the real-world problems that plague broader cloud adoption so IT can control its data destiny.

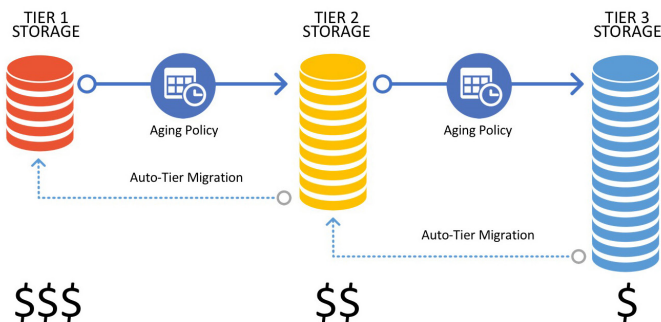
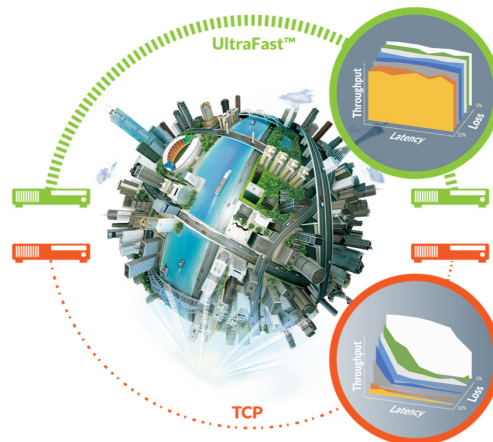
### Cloud Data Platform CloudFabric™ Components



## DETAILED FEATURES OF SOFTNAS CLOUD PLATINUM EDITION

### High Speed Data Transfer

SoftNAS® UltraFast™ provides high speed data transfer, accelerating storage traffic up to 20 times faster compared to TCP/IP network transmission speeds. Unlike WAN acceleration products, SoftNAS UltraFast is an intelligent, self-tuning storage acceleration technology over the WAN. SoftNAS UltraFast is UDP-based and is designed to address latency, congestion, poor QoS, as well as, slow data replication speeds, all without redesigning or changing applications, networks or storage. SoftNAS UltraFast Bandwidth Scheduling enables throughput and bandwidth throttling schedules to regulate network traffic and prioritize bandwidth use.

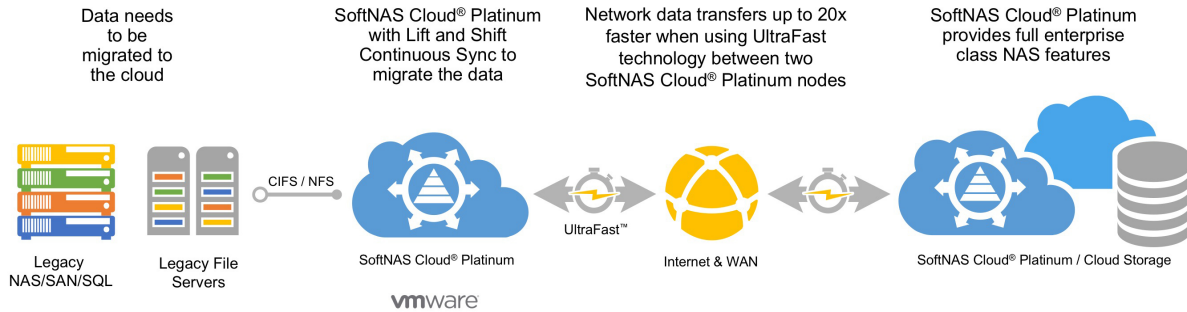


### Auto Tiered Storage

With the SoftNAS® SmartTiers™ feature of SoftNAS Cloud Platinum edition, you can define policies to create auto tiered storage, automatically keeping the most recently accessed data on higher performance storage while older data can be aged and moved to less expensive, lower performance storage. Customers can save up to 67% of their cloud storage costs using the SoftNAS SmartTiers feature.

## Lift and Shift File Migration (Powered by Apache NiFi)

The Lift and Shift feature of SoftNAS Cloud® Platinum edition provides a wizard to live migrate on-premises file data to the public cloud while it's in production. Point SoftNAS Cloud® Platinum edition to existing NAS shared storage volumes, select your public cloud storage destination (fronted by SoftNAS Cloud), and immediately begin moving your data to the cloud. Source files can be hosted on a SAN / NAS with an exposed mount point (CIFS/SMB or NFS), or Windows file servers.



## Cloud Data Management Environment for DevOps and Administrators

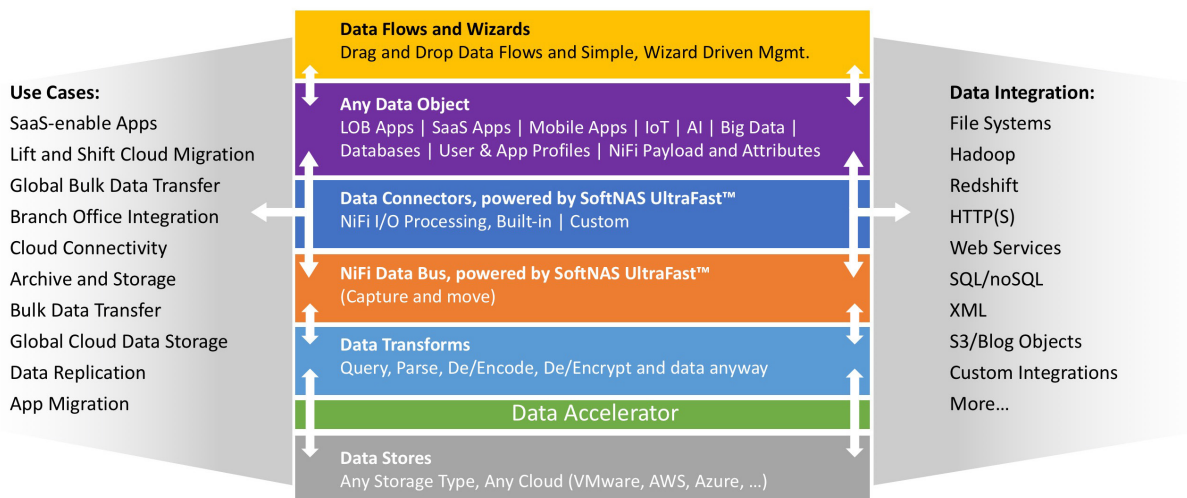
SoftNAS Cloud Platinum FlexFiles Architect™ is a development environment that provides a seamless experience between design, control, feedback and monitoring for developing data integration and movement flows. Create custom cloud data flows with SoftNAS FlexFiles Architect.

### SoftNAS Processor Library

- Includes built-in community NiFi processors and SoftNAS custom processors all organized by category for easy filtering and use in FlexFiles Architect.
- SoftNAS custom processors include: GetFileList, ProcessFileList, and RsyncFile.

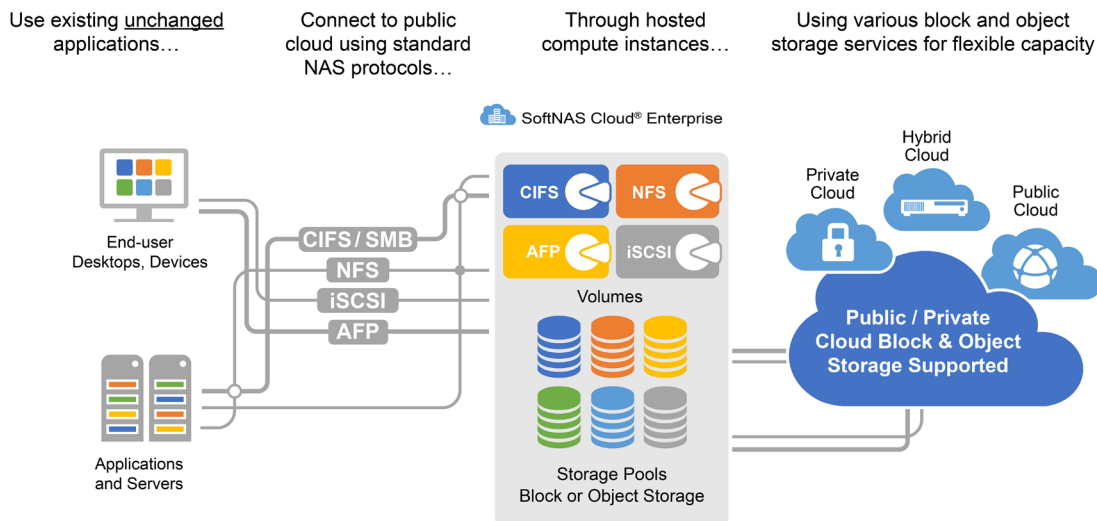
### SoftNAS Dataflow Templates

- Data flows can be exported as dataflow templates for use in the creation of later dataflows. SoftNAS also provides simple out-of-the-box templates to get started that are not available out of NiFi open source depot.
- SoftNAS templates: one-to-many, and many-to-one.
- SoftNAS NiFi templates are included as part of the Platinum edition and can be imported into FlexFiles Architect.



## Cloud NAS — Enterprise-Grade, Virtual, Software Only

- All the features and functionality of SoftNAS Cloud® Enterprise edition, the full-featured enterprise-class cloud NAS filer, are included with SoftNAS Cloud Platinum edition.
- Supporting NFS, CIFS, iSCSI block and Apple File Protocol (AFP) storage protocols, SoftNAS Cloud Platinum also includes high-availability, deduplication, compression, replication, cloning, encryption (at-rest and in-transit), LDAP and Active Directory integration, thin-provisioning and scheduled snapshot policies.
- SoftNAS Cloud® supports nearly 140 AWS instance or Azure VM options and six storage backends across the AWS and Azure Marketplaces or on-premises on VMware vSphere.
- SoftNAS Cloud Platinum offers customers the broadest range of storage options in terms of price vs. performance, backend storage selection and file protocol support, on-demand at petabyte scale.



## Includes Features of Apache NiFi

### Visual UI

- The open source “Apache NiFi”, a core building block of SoftNAS Cloud Platinum edition, provides a powerful and user friendly “drag-and-drop” data ingestion and integration capability upon which SoftNAS Cloud Platinum features are built.
- Processor groups, data routing processors, data transformation processors, custom SoftNAS processors, and system mediation logic make up “building blocks” of the UI. These processors can be dragged and dropped in a web-based UI to build powerful data integration flows.

### Data Flow Queuing

- SoftNAS Cloud Platinum edition has the ability to intelligently manage and queue up data, so data is not lost even when the network connection is noisy, has high latency/congestion or drops.

### Off-the-Shelf, Community supplied NiFi Data Integration Processors

- Integrate disparate data sources into SoftNAS Cloud Platinum edition with pre-built data integration processors for:  
*Files / Filesystems, Hadoop / HDFS, HTTP / HTTPS, Web services, XML, JSON, SQL, Objects, Text / CSV, FTP, SFTP, Mongo, Solr, Twitter, Email, JMS, Kafka, Avro, SQS, Kite, Linux bash, Custom, process, APIs*

### Data Pipelines — Create Data Flow Processes To Transform Data on the Fly:

- *REST: get / put / copy / delete, Query / XQuery / XPath, Split / merge, Parse/extract, Convert, Hash, Log, Modify, Route / distribute, Encrypt / decrypt, Base64 encode/decode, Evaluate regular expression*

For a more complete list of the Community-supplied NiFi processors go to: <https://nifi.apache.org/docs.html>

## Technical Requirements

<b>AWS</b>	Please see SoftNAS Cloud listings on the AWS marketplace	
<b>Azure</b>	Please see SoftNAS Cloud listings on the Azure marketplace	
<b>VMware</b>	(See here for up-to-date VMware requirements <a href="https://docs.softnas.com/display/SD/VMware+vSphere+System+Requirements">https://docs.softnas.com/display/SD/VMware+vSphere+System+Requirements</a> )	
<b>VMware Supported Versions</b>	5.5 and newer	
<b>Compute Requirements</b>		
<b>Light Use</b>	2 vCPU	Minimum
<b>General Use</b>	4+ vCPU	Recommended, based on use of compression
<b>Heavy Use</b>	8+ vCPU	Large-scale use with compression and deduplication
<b>Memory (RAM) Requirements</b>		
<b>Base RAM - General</b>	2 GB	Minimum
<b>System RAM - Medium</b>	8 GB	Medium-scale use
<b>System RAM - Heavy</b>	32+ GB	Large-scale use with increased caching
<b>Additional RAM</b>	1 GB per 1 TB of deduplicated storage	Required for best performance
<b>Network Interface Requirements</b>		
<b>Up to 120 MB/sec</b>	1 GbE	Minimum
<b>Up to 750 MB/sec</b>	10 GbE	Other VMware-supported networks, such as Infiniband, are also available
<b>Storage</b>		
<b>Boot Disk</b>	30GB, Thin-provisioned	
<b>Data Disks</b>	Virtual Hard Disks (VMDK) for data storage will support any VMware-supported datastore.	
<b>Hardware RAID</b>	If the local disk controller supports hardware RAID, hardware RAID can be used to create VMware host datastores.	
<b>Software RAID</b>	If SoftNAS Cloud is preferred to handle RAID, add VMDKs to the SoftNAS Cloud VM and configure RAID in the SoftNAS Cloud product.	
<b>iSCSI SAN</b>	SoftNAS Cloud can mount and support all VMware-supported disk configurations, including iSCSI SAN via software or hardware HBA.	

## SoftNAS Cloud® Product Edition Feature Matrix

● All Editions

● Enterprise &amp; Platinum

● Platinum Only

StorageCenter™	Web-based management console for managing SoftNAS Cloud® software
Update Proxy	Single Firewall Port Software Updates: Doesn't require multiple open firewall ports for connection to different software update depots.
No Storage Downtime Guarantee™	SoftNAS Cloud® storage SLA when either DCHA™ or SNAP HA® is being used
Petabyte scale	Scales data storage from terabytes to 16 petabytes or greater
Multiple Storage Protocol Support	POSIX compliant file access to backend block and object storage via NFS, CIFS/SMB (with Active Directory), AFP (Apple File Protocol) and iSCSI block services.
360-degree Encryption™ (In-Transit & At-Rest)	Military-grade Encryption for data in-transit and data at-rest (only customer controls keys)
Active Directory and LDAP Integration	Integration with Access Control systems to prevent un-authorized access
Compression	Amount of storage that data consumes is "shrunk" by removing extra "white space" between the blocks of data, thereby reducing the overall storage required.
Inline Deduplication	Duplicated data is eliminated allowing for a more efficient and cost effective use of storage.
Snapshots and Recovery	Scheduled or manual images of storage (snapshots) in order to rollback data (recovery) to a point-in-time.
Dual Controller HA (DCHA™) – Object storage	Application resiliency across zones / regions and Data availability in a single zone / region
ObjFast™ / ObjectBacker™ (Patent pending)	An acceleration method that speeds up the reads, writes & deletion of data located object storage to near block level storage performance.
Object storage support	Provides NAS file service support to native object storage so applications can use it without code changes.
SSD read cache support	Use of a solid state drive (SSD), that provides an additional layer of cache, in addition to RAM memory cache.
SSD write log support	Use of a SSD, preferably in a RAID 1 (mirror), to provide caching for incoming writes to be eventually written to lower-speed hard disk drive (HDD) storage.
Block storage support	Provides NAS file service support to native block storage so applications can use it without code changes.
SNAP HA® – Block and/or Object storage	Maximum uptime with both Application and Data resiliency across two zones / regions
SnapReplicate™	Replicate data from one storage pool to a duplicate storage pool. Used with either Block and/or Object storage.
DeltaSync®	Reduce the Recovery Time Objective (RTO) to hours for cluster recovery from a high-availability failover event.
SnapClone®	Create a new volume from a volume snapshot in order to recover from an event or for DevOps to test with.
SmartTiers™ (Patent pending)	Automatically move data (Auto-Tiering) that is less frequently accessed to less expensive/performant storage.
UltraFast™ (Patent pending)	Used to bulk transfer data from 1 or more locations to 1 or more other locations at speeds up to 20x faster than TCP/IP
FlexFiles™	A "drag and drop" dev environment that provides a seamless experience between design, control, feedback and monitoring for data integration and movement
Lift and Shift	An advanced cloud data management wizard that migrates on-premises file data to the public cloud.
Apache NiFi	An open source, powerful and user friendly, "drag-and-drop" data ingestion and integration capability.



**SoftNAS®** To learn how we can customize a solution to meet your company's needs, visit [SoftNAS.com](https://SoftNAS.com)

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