

NETAPP KEYSTONE STORAGE AS A SERVICE (STAAS)



NetApp Keystone® storage as a service (STaaS) lets you consume file, block, and object data storage and data management services in a flexible way, either on your premises or in a hybrid cloud. Keystone STaaS enables you to accelerate time to market and value because you don't have the business and IT burdens of procuring and managing assets and resources. You can consume the service as is or customize it with additional professional or managed services; you can also use it as a foundation for building higher level, value-added services. This flexibility makes Keystone STaaS suitable for customer consumption, with the service delivered directly by NetApp or by NetApp partners or service providers.

You can choose between an On-Premises subscription or a hybrid subscription, which combines on-premises storage with NetApp® Cloud Volumes ONTAP® software. The subscriptions offer:

- Block, file, and object storage types
- (Optional for On-Premises) Cloud-based Cloud Volumes ONTAP, providing bursting, data protection, and migrating to the cloud
- Capacity, health, performance, and power consumption service levels
- Capacity, health, and performance dashboard and reporting
- Low minimum capacity and term commitments

- Additional 20%, 40%, or 60% pay-per-use burst capacity
- NetApp ONTAP or StorageGRID® data protection and management features
- NetApp owned subscription products that are deployed at customer site
- Monitoring, service management, support, updates, and deinstallation are included
- Customer-controlled access, security, and administration of subscription products
- Keystone Success Management
- Additional STaaS services available for extra fees

	Description
Offerings	<ul style="list-style-type: none">• Keystone STaaS On-Premises Service• Keystone STaaS Hybrid Cloud Service (On-Premises + Cloud Volumes ONTAP)
Term	<ul style="list-style-type: none">• STaaS On-Premises Service: up to 5-year terms• STaaS Hybrid Service: up to 3-year terms
Minimum commitments and invoicing	<ul style="list-style-type: none">• Required minimum capacity commitments by performance service levels• Available invoicing options for STaaS On-Premises Service:<ul style="list-style-type: none">• Monthly, in arrears• Quarterly, in advance• Semi-Annual, in advance• Annual, in advance• Invoicing for STaaS Hybrid: Monthly, in arrears
Service modifications	<p>Subject to certain terms and conditions:</p> <ul style="list-style-type: none">• Committed capacity can be increased or decreased• On-Premises spend can be reallocated to CVO spend
Data storage types and included features	<ul style="list-style-type: none">• Unified (file and block) and Block Optimized storage types<ul style="list-style-type: none">• Delivered on NetApp ONTAP AFF/FAS or ONTAP ASA platforms, respectively• Includes use of all ONTAP One features.• Object storage type<ul style="list-style-type: none">• Delivered on NetApp StroageGRID platform• Includes use of all StorageGRID features
Included services	<ul style="list-style-type: none">• Subscription products owned and selected by NetApp• Site requirements• Monitoring and reporting• Technical support and support parts delivery and replacement• Capacity, health, and performance management• Hardware and software updates• Keystone Success Management
Additional Services	<ul style="list-style-type: none">• Advanced data protection (MetroCluster IP)• Data tiering to supported non NetApp targets• Nonreturnable nonvolatile components• U.S. citizen support (USCS)• Logical or physical metering• Selectable burst capacities• Data Infrastructure Insights• Expedited activation• Keystone supplemental services• Networking• Non-returnable drives (NRD)

Description

On premises performance service levels

Unified storage type

Storage Type	Unified (ONTAP)			
Supported Protocols	FC, iSCSI, NFS, NFSv4/RDMA, NVMe/FC, NVMe/TCP, SMB, S3* [* for FabricPool use only]			
Performance Service Level	Extreme	Premium	Standard	Value
Example Workloads	AI/ML, HPC, InMem DB	Analytics, EDA, OLTP	OLAP, IoT, Containers	Backup, Archive
Target 90th percentile Latency	<1ms	<1ms	<4ms	>4ms
Target Maximum IOPS*, **	1M	550K	500K	N/A
Target Maximum GBps*	40	20	20	N/A
Platform	ONTAP A Series	ONTAP A Series	ONTAP C Series	ONTAP FAS Series
Min committed capacity per PSLI	50 TiB		100 TiB	100 TiB
Committed capacity increase increment	25 TiB			
Committed and metered capacity type	Logical Capacity or Physical Capacity			

* Mutually exclusive targets. Actual performance may differ based on various factors, including OS version, HW, workload type and simultaneity.
** IOPS: ONTAP 9.16.1; NFS; Random; 70%R/30%W; 8K block size; 1ms latency (4ms for Standard). Throughput: ONTAP 9.16.1; NFS; Sequential, 100% R; 32K block size.

Block Optimized and Object storage type

Storage Type	Block Optimized (ONTAP)		Object (StorageGRID)	
Supported Protocols	NVMe/TCP, NVMe/FC, NVMe, iSCSI		S3	
Performance Service Level	Extreme	Premium	Standard	Value
Example Workloads	SAP HANA, Oracle	MS SQL Server, EPIC	-	-
Target 90th percentile Latency	<1ms	<1ms	N/A	N/A
Target Maximum IOPS*, **	850K	450K	N/A	N/A
Target Maximum GBps*	65	25	N/A	N/A
Platform	ONTAP ASA A-Series	ONTAP ASA A-Series	StorageGRID Flash	StorageGRID HDD
Min committed capacity per PSLI	50 TiB		200 TiB	500 TiB
Committed capacity increase increment	25 TiB		25 TiB	100 TiB
Committed and metered capacity type	Logical Capacity or Physical Capacity		Physical Capacity	

* Mutually exclusive targets. Actual performance may differ based on various factors, including OS version, HW, workload type and simultaneity.
** IOPS: ONTAP 9.16.1; FCP; Random; 70%R/30%W; 8K block size; 1ms latency. Throughput: ONTAP 9.16.1; FCP; Sequential, 100% R; 64K block size.

Cloud volumes performance service levels

Storage Type	Cloud Volumes ONTAP
Supported Protocols	NFS, CIFS, iSCSI, S3* (*AWS & Azure only)
Platform	CVO
Min committed capacity per Keystone order	4 TiB
Capacity increase increment	1 TiB
Committed and metered capacity type	Logical Capacity

Service levels

- Capacity (committed capacity plus selected burst capacity limit)
- Performance (per performance service level table above)
- Availability (99.999%), for Unified and Block Optimized storage types
- Technical support (time to respond: P1, 30 min; P2, 2 hrs; P3, 8 hrs; P4, 24 hrs)
- Service parts delivery and on-site replacement (4 hours, where available)
- Sustainability



Contact Us



About NetApp

NetApp is the intelligent data infrastructure company, combining unified data storage, integrated data services, and CloudOps solutions to turn a world of disruption into opportunity for every customer. NetApp creates silo-free infrastructure, harnessing observability and AI to enable the industry's best data management. As the only enterprise-grade storage service natively embedded in the world's biggest clouds, our data storage delivers seamless flexibility. In addition, our data services create a data advantage through superior cyber resilience, governance, and application agility. Our CloudOps solutions provide continuous optimization of performance and efficiency through observability and AI. No matter the data type, workload, or environment, with NetApp you can transform your data infrastructure to realize your business possibilities. www.netapp.com