



# Flex Subscription FAQ

NetApp Keystone

NetApp  
March 11, 2021

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# Overview

## What is NetApp Keystone?

NetApp Keystone is a portfolio of on-premises capital expenditure (capex) alternatives, consisting of NetApp Keystone Flex Pay (Flex Pay), and NetApp Keystone Flex Subscription (Flex Subscription).

- **Flex Pay:** A portfolio of payment solutions including traditional financing, leasing, and fixed/variable options to meet your customer's cash flow needs.
- **Flex Subscription:** Pay-as-you-grow subscription-based service that brings a cloud-like experience on premises, with an outcome-based service option (NetApp-operated).  
For more information, see [here](#)

## How does NetApp Keystone benefit my customers?

NetApp Keystone is the bridge that connects the pillars of our capex and hybrid cloud strategy— delivering agility, financial flexibility, and reduced financial risk that helps customers meet their cash flow and business needs.

The NetApp Keystone brand offers a portfolio of flexible payment solutions that include traditional financing, leasing, and fixed/variable options for cash-conscious customers along with Flex Subscription.

- **Flex Pay (financial flexibility, payment solutions):**
  - Prefer to own the asset title, but need payment/financial flexibility (rental model, lease, loan, installments)
  - Stringent security requirements with no external data connectivity options to enable subscription
  - Workloads have predictable capacity growth and aligns with capex budgets
  - Well-managed infrastructure with high asset utilization
  - Prefer to procure storage on a raw-capacity basis and retain efficiency benefits
- **Flex Subscription (OPEX, cloud-like experience):**
  - Prefer 100% OPEX, so assets will not end up on your customer's balance sheet
  - Internal/external Service Providers looking to align costs with usage/revenue
  - Workloads with unpredictable capacity growth
  - Reallocated IT resources from typical storage tasks (migrations, tech refresh, upgrades, and so on)
  - Short-term solution before migrating workloads to the cloud
  - Repatriating workloads back from the cloud to on- premises

## What is Flex Subscription?

Flex Subscription is a new, flexible, on-premises subscription-based procurement model. It enables customers to accelerate time to value by removing the hurdles around managing the resources and going through the lengthy procurement cycle. Flex Subscription allows customers to align economics to their business priorities. For more information, see [here](#)

## What does on-premises mean?

On-premises is defined as a customer-owned data center or customer-owned space in a colocation facility. The customer is responsible for the space, power, and cooling.

## What are the benefits of Flex Subscription services?

Some benefits of Flex Subscription services are:

- Frees up IT staff from complicated storage-related tasks and allows them to focus on application management
- Reduces upfront capital investment
- Allows customers to meet their demands without overprovisioning
- Aligns data storage costs with business needs/activity
- Simplifies infrastructure provisioning by bypassing complex organizational procurement procedures
- Keeps data secure on their premises
- Enables proper control over compliance, performance, and security

For more information, see [here](#)

## Service offer details

### What is offered as part of NetApp Keystone Flex Subscription?

NetApp Keystone Flex Subscription (Flex Subscription) is a subscription-based service offering for block, file, and object data services that can be deployed on-premises and can be operated by NetApp, a partner, or a customer.

### What storage service offers are provided as part of Flex Subscription?

The following chart shows the data storage performance service levels offerings.

	File and Block					Object	Block			
	Extreme	Extreme w/data tiering <sup>2</sup>	Premium	Premium w/data tiering <sup>2</sup>	Standard	Value	Object	Extreme	Premium	Standard
Workload type	Analytics, databases		VDI, virtualization apps, SW dev		File shares, web servers	Backup	Media repository, archiving	HPC	Video surveillance	Backup
Target IOPS/TiB	6,144	6,144 <sup>1</sup>	2,048	2,048 <sup>1</sup>	128	N/A	N/A	N/A	N/A	N/A
Max IOPS/TiB	12,288	12,288 <sup>1</sup>	4,096	4,096 <sup>1</sup>	512	N/A	N/A	5,500	4,000	N/A
Max throughput MBps (32KB/IOP)	384	384 <sup>1</sup>	128	128 <sup>1</sup>	16	N/A	N/A	43	31	N/A
Latency	<1 ms	<1 ms <sup>1</sup>	< 2 ms	< 2 ms <sup>1</sup>	<17 ms	N/A	N/A	< 0.5 ms	<0.5 ms	N/A
Minimum capacity	100TiB* <sup>^</sup>						1 PiB	100 TiB	100 TiB	300 TiB
Protocols	NFS, CIFS, iSCSI, FC						S3	FC, iSCSI		

\* Minimum one-year term and 100TiB of storage.

<sup>^</sup>Channel led opportunities: Starts with 15TiB for Extreme

<sup>1</sup> Performance SLAs are applicable for data in hot tier

<sup>2</sup> Max allowed data in hot tier: 25%

### What add-on services are supported?

Advanced data protection (backup and disaster recovery) and Hybrid Cloud Tiering with FabricPool are add-on services that can be chosen at an additional cost.

### What service levels does NetApp guarantee with the service?

In a NetApp operated scenario, NetApp Keystone guarantees IOPS/TiB for the storage that is provisioned and the latency for each service level.

**What is the typical length of term of a Flex Subscription agreement?**

Flex Subscription offers 12, 24, and 36-month term periods.

**How can I access the storage?**

In a NetApp-operated (standard) model, the storage controllers (ONTAP System Manager or administrative access to the systems) are owned and managed by NetApp. You can monitor and manage your storage only through NetApp Service Engine UI and APIs.

In a customer-managed (or Lite) deployment, where the NetApp Service Engine UI and APIs are used mainly for billing functions, you can access the storage controllers, such as Active IQ Unified Manager and ONTAP System Manager, and directly access ONTAP clusters.

**How do I manage the service?**

NetApp Service Engine is the orchestration and management tool that you can use to provision storage and get reports on the service usage.

**Are APIs provided to integrate with customer tools?**

Yes, RESTful APIs are available to integrate into your own applications.

**Who does the monitoring and operations?**

For the NetApp-operated service, NetApp is responsible for monitoring the infrastructure remotely so that the service is delivered according to the agreed expectations.

For the partner-operated service, partner is responsible for monitoring the infrastructure remotely so that the service is delivered according to the agreed expectations.

For the customer-operated service, customer is responsible for monitoring the infrastructure and raise any issues to NetApp.

**What happens if I terminate the service early?**

The minimum service commitment is 12 months. If you cancel the service early, the residual value needs to be paid upfront.

**Is there an opportunity to convert into a purchase after the initial term is completed?**

No. The offer does not include an option to convert into a purchase. Additionally, previously purchased NetApp products are outside the scope of this program.

## NetApp Keystone Flex Subscription

**What is the minimum committed capacity?**

The minimum committed capacity for a NetApp Keystone Flex Subscription (Flex Subscription) is 100 TiB, per site across one or more service tiers.

**What does Flex Subscription map to?**

Flex Subscription maps to a single site or a single data center and it can comprise of different performance service levels.

**How can I increase the committed capacity in a subscription?**

You can submit a capacity addition request through the NetApp Service Engine management tool or through their NetApp Keystone success manager.

**Does increasing the capacity extend the term?**

All the additions are co-term to the existing term period, except if the request is made in the last 90 days of the subscription, in which case the term must extend for at least 12 months.

**Does a new subscription have flexibility to come with a new yearly term?**

Yes, new subscriptions can have new terms separate from any existing subscriptions.

**Can I mix multiple subscriptions on the same ONTAP cluster?**

No, each cluster is assigned to a particular subscription.

**Can I reduce the committed capacity?**

No. During a term, the committed capacity can only be increased but not decreased.

**What is burst capacity?**

You can increase and decrease usage up to 20% above the committed capacity. The burst capacity usage is measured on a daily basis and billed only when used.

For example, if the committed capacity is 100 TiB, you can burst up to 120 TiB.

**Is there a premium charge for using burst?**

The burst capacity usage up to 20% of committed capacity is billed at the same rate as committed capacity, any usage above 20% of committed capacity is billed at 50% premium.

**What is the benefit of burst capacity?**

Burst capacity gives you the flexibility to consume storage on demand versus committing for the long term.

**Where can I see the committed and burst capacity usage?**

NetApp Service Engine has built-in dashboards to report consumed capacity against committed capacity.

**Will there be any notifications if I reach a certain percentage in committed capacity usage?**

Yes, the management tools provide notifications on capacity usage through the NetApp Service Engine dashboard.

## **Operational models and responsibilities**

**What are the different operating models and who is responsible for the major activities?**

The following chart is an overview of the three operating models that a customer can select: NetApp Operated, Partner Operated, and Customer Operated. For each of the operating models, the chart below shows the roles and responsibilities across the service lifecycle.

## Roles and Responsibilities across Service Lifecycle

	NetApp Operated	Partner Operated	Customer Operated	
	NetApp	Partner	NetApp	Customer
<b>Build</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
• Install	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
• Configure	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
• Deploy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
• Onboard	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>Monitor &amp; Administer</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
• Monitor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
• Alert	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
• Administer	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
• Report	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
<b>Operate &amp; Optimize</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
• Manage capacity	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
• Manage performance	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
• Manage SLA	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
<b>Support</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
• Support customer	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
• HW break fix	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
• SW support	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
• Upgrades and patches	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

### What is a NetApp-operated model?

This operating model allows the customer to subscribe to the offered services, according to the selected performance tiers and storage service types and selects the NetApp operated option at an extra cost. NetApp defines the architecture and products, installs at the customer premises, and NetApp manages the day-to-day infrastructure management operations using our storage and IT resources. Available storage service types are file, block (iSCSI), and object.

### What is a partner-operated model?

The operating model for the partner is similar to the NetApp-operated model, but with the partner operating the service for their end customer. In this model, the partner is the referenced contracted party.

### What is a customer-operated model?

This operating model allows the customer to subscribe to an offered service, according to the selected performance tiers and storage service types. NetApp defines the architecture and products and installs at the customer premises and allows customers to manage the infrastructure using their storage and IT resources. Available storage service types are file, block (iSCSI), and object. In this model, the customer referenced the contracted party, and this can be an end-user or partner.

### Who owns the equipment?

In all three operating models, NetApp owns the title to all the hardware and software installed at the customer premises.

# Operations and Support

## How do I view the Flex Subscription usage?

NetApp Service Engine provides a dashboard view, with information on all the services that are subscribed to and how much is consumed. For details about NetApp Service Engine, see [here](#).

## How do I report any issues with the service?

NetApp Keystone support can be reached through these various channels:

- Support email: [keystone.services@netapp.com](mailto:keystone.services@netapp.com)
- Escalations email: [keystone.escalations@netapp.com](mailto:keystone.escalations@netapp.com)

## Can I order new storage service?

Yes, new storage service or expansion to storage service can be requested from the NetApp Service Engine portal. The request is processed by the NetApp Keystone operations team before making it available for use.

## Are increases to storage commitments available immediately?

Depending on the amount of capacity requested, a determination is made whether the capacity is already deployed, or it requires additional equipment to be shipped and installed.

## Can workloads be moved between the tiers?

Yes, workloads can be moved between tiers, provided the user has subscribed to the tier the workload is moving to. However, we do not recommend moving from a higher tier to a lower tier because it can cause a performance degradation. The process is achieved by simply editing the file share and changing the service level setting.

## What software version (for example, ONTAP) is installed as default?

Depending on the service tier subscribed (for example, ONTAP with File and Block services, SANtricity for Block, and StorageGrid for Object) the support team installs the latest stable release with no security or feature issues.

## Can I request a particular software version?

No. NetApp Keystone has standardized the software version across all its customer base.

## Will I be informed about software upgrades?

Yes. All maintenance/upgrade activities are communicated to and scheduled at a mutually agreeable time with the customer by the NetApp Keystone Success Manager.

# NetApp Service Engine/Self-service access portal

## What is NetApp Service Engine?

NetApp Service Engine is a self-service portal that is available in the NetApp-operated model for you to log into and provision storage based on your NetApp Keystone Flex Subscription service. The tool also provides reports on what their consumption levels are against their subscription and initiate any service requests or subscription changes.

## NetApp Service Engine required in the customer-operated model?

In a customer-operated model, NetApp Service Engine is required. It provides basic reports on the consumption details and is required to collect and report the billing information.



**Where is NetApp Service Engine installed?**

In a NetApp-operated model, NetApp Service Engine is installed locally on the NetApp provided compute resources. In a customer-operated model, NetApp Service Engine is installed on the customer-provided compute resources.

**Who can log into NetApp Service Engine?**

Users can be authenticated against NetApp SSO or local users configured in NetApp Service Engine.

**How is access controlled?**

NetApp Service Engine provides role-based access control (RBAC), and each user can be associated to a role, which defines what actions they can perform. The RBAC assignment is done by the customer using NetApp Service Engine.

**What access controls are available?**

The following access controls are available:

- **Customer Admin.** An administrative person from the customer side who has rights to create file services (which defines Active Directory authentication servers, networking, and so on), changes to subscription, create new users, and so on.
- **Read-only.** Has access to portal but cannot create any storage or change anything.
- **User.** Has rights to provision storage, resize, view reports, but cannot perform any administrative job like creating file servers, change subscription, etc.,
- **App.** Specific results depend on each customer's installation in accordance with published specifications.

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