NetApp Keystone® Storage-as-a-Service Service Description

General

This Service Description describes the On-Premises and Hybrid Cloud, consumption-based, STaaS Services that are available to an End User pursuant to the Keystone STaaS Terms, incorporated herein. This Service Description also incorporates by reference the corresponding Service Description Supplement.

STaaS Services described in this Service Description may be provided to End User by NetApp or a NetApp Partner. Partner may also assume some of the responsibilities of NetApp under this Service Description.

1. STaaS Features and Services.

1.1. Data Storage Types.

1.1.1. **Unified**: delivered on NetApp ONTAP AFF and/or FAS platform Storage Arrays.

1.1.2. **Block Optimized**: delivered on NetApp ONTAP ASA platform Storage Arrays.

1.1.3. **Object:** delivered on NetApp StorageGRID platform Storage Arrays.

1.1.4. **AFX:** delivered on NetApp AFX Cluster.

1.2. Capacity.

1.2.1. **Committed Capacity**

Use of the STaaS Services requires a subscription to a certain amount of Committed Capacity per Unified or Block Optimized PSL, or per AFX Cluster, per Order, subject to minimum Committed Capacities and capacity change increments as set forth in Section 1.3.1. Committed Capacities are defined per Storage Array for Unified and Block Optimized DSTs and per AFX Cluster for AFX DST.

1.2.2. **Consumed Capacity**

1.2.2.1. **Unified or Block Optimized Data Storage Type.**

1.2.2.1.1. Effective Capacity Metering: Consumed Capacity is calculated, per Storage Array, as the amount of metered Effective Capacity in use to store all instances and types of End User Data, plus Useable Capacity in use to store metadata and differential data of Snapshot™ copies and certain clones.

1.2.2.1.2. Physical Capacity Metering: Consumed Capacity is calculated, per Storage Array, as the amount of metered Useable Capacity in use to store all instances and types of End User Data, plus Useable Capacity in use to store metadata and differential data of Snapshot™ copies.

1.2.2.2. **Object Data Storage Type.** Consumed Capacity is calculated as the amount of metered Useable Capacity in use to store all instances and types of End User Data on all nodes based on information lifecycle management ("ILM") policy(ies) configured.

1.2.2.3. **Cloud Volumes ONTAP.** Consumed Capacity is calculated as the amount of metered Provisioned Effective Capacity of all CVO volumes.

1.2.2.4. **AFX Data Storage Type.** Consumed Capacity is calculated, per AFX Cluster, as the amount of metered Useable Capacity in use to store all instances and types of End User Data, plus Useable Capacity in use to store metadata and differential data of Snapshot™ copies.

1.2.3. **Burst Capacity**

1.2.3.1. **Burst Capacity Limit.** Keystone Services provide a default Burst Capacity Limit of 20% of Committed Capacity, per Storage Instance, with additional options provided in Section 2.2.

1.2.3.2. **Burst Rate.** Burst Capacity consumption will be invoiced at the specified Committed Capacity rate corresponding to the selected DST and PSL.

1.2.3.3. **Burst Waiver Period.** STaaS Services provide a Burst Waiver Period of sixty (60) days from the Start Date.

1.3. Service Levels

1.3.1. Performance Service Levels.

1.3.1.1. Unified

Data Storage Type	**Unified** (ONTAP)			
Supported protocols	FC, iSCSI, NFS, NFSv4/RDMA, NVMe/FC, NVMe/TCP, SMB, S3			
Performance Service Level (all specifications per PSLI ["H/A Pair"])	**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*, [a]	1M	550K	250K	N/A
Target Maximum GBps*, [a]	40	20	10	N/A
Platform	AFF A-Series		AFF C-Series	FAS
Min Committed Capacity	50 TiB		100 TiB	100 TiB
Committed Capacity Adjustment Increment (increase or decrease)	25 TiB			
Committed and Metered Capacity type	Effective Capacity or Useable Capacity			

* The "Target Maximum IOPS" and "Target Maximum GBps" are mutually exclusive per Performance Service Level; actual performance may differ based on various factors, including, for example, OS version, hardware workload type, and simultaneity.

[a] 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.

1.3.1.2. Block Optimized

Data Storage Type	**Block Optimized** (ONTAP)		
Supported protocols	NVMe/TCP, NVMe/FC, FC, iSCSI		
Performance Service Level (all specifications per PSLI ["H/A Pair"])	**Extreme**	**Premium**	**Standard**
Example Workloads	SAP HANA, Oracle, MS SQL Server, EPIC		
Target 90th percentile Latency	<= 1ms	<= 1ms	<= 4ms
Target Maximum IOPS*, [b]	850K	450K	120K
Target Maximum GBps*, [b]	65	25	6
Platform	ASA A-Series		ASA C-Series
Min Committed Capacity	50 TiB		100 TiB
Committed Capacity Adjustment Increment (increase or decrease)	25 TiB		25 TiB
Committed and Metered Capacity type	Effective Capacity or Useable Capacity		

* The "Target Maximum IOPS" and "Target Maximum GBps" are mutually exclusive per Performance Service Level; actual performance may differ based on various factors, including, for example, OS version, hardware workload type, and simultaneity.

[b] IOPS: ONTAP 9.16.1; FCP; Random; 70%R/30%W; 8K block size; 1ms latency (4ms for Standard). Throughput: ONTAP 9.16.1; FCP; Sequential, 100% R; 64K block size.

1.3.1.3. Object

Data Storage Type	**Object** (StorageGRID)	
Supported protocols	S3	
Performance Service Level	**Standard**	**Value**

Platform	SGF6112	SG6160
Min Committed Capacity per Order	200 TiB	500 TiB
Committed Capacity Adjustment Increment (increase or decrease)	25 TiB	100 TiB
Committed and Metered Capacity type	Useable Capacity	

1.3.1.4. Cloud Volumes ONTAP

Data Storage Type	**Cloud Volumes ONTAP**
Supported Protocols	NFS, CIFS, iSCSI, S3* (*AWS & Azure only)
Platform	CVO
Min Committed Capacity per Order	4 TiB
Committed Capacity Adjustment Increment (increase or decrease)	1 TiB
Committed and Metered Capacity type	Effective Capacity

1.3.1.5. AFX

Data Storage Type	**AFX** (ONTAP)
Supported Protocols	NFSv3, NFSv4/RDMA, pNFS, SMB, S3
Performance Service Level (all specifications per AFX storage controller, unless otherwise indicated)	**Extreme**
Example Workloads	AI/ML, HPC, InMem DB
Target 90th percentile Latency	<= 1ms
Target Maximum IOPS [*, c]	625K
Target Maximum GBps [*, c]	20
Platform	AFX
Min Committed Capacity (per AFX Cluster)	200 TiB
Committed Capacity Adjustment Increment (increase or decrease)	100 TiB
Committed and Metered Capacity type	Useable Capacity

* The "Target Maximum IOPS" and "Target Maximum GBps" are mutually exclusive per Performance Service Level; actual performance may differ based on various factors, including, for example, OS version, hardware workload type, and simultaneity.

c IOPS: ONTAP 9.18.1; NFSv4; Random; 70%R/30%W; 4K block size. Throughput: ONTAP 9.18.1; NFSv4; Sequential, 100% R; 64K block size.

1.3.2. Service Level Objectives

1.3.2.1. **Availability SLO**. Target 99.999% service availability, per Storage Array, for Unified and Block Optimized DST, or per AFX storage controller for AFX DST. Service Level Agreement is available for qualified Orders.

1.3.2.2. **Performance SLO**. Target 90th percentile latency, per Storage Instance, for up to Target Maximum IOPs for Unified (not including "Value" PSL), Block Optimized, and AFX DST. Service Level Agreement is available for qualified Orders.

1.3.2.3. **Service Parts Delivery and Replacement SLO**. Four hours delivery and on-site replacement, from time need is determined by Keystone Support, where geographically available.

1.3.2.4. **Sustainability SLO**. Power consumption up to maximum rated watts of STaaS Products deployed to deliver Storage Array for Unified (not including "Value" PSL) and Block Optimized DST, or AFX Cluster for AFX DST, as provided in the Service Description Supplement. Service Level Agreement is available for qualified Orders.

1.3.2.5. **Technical Support SLO**. Time-to-Respond targets, after receipt of incident ticket by Keystone support, based on incident priority level assigned by Keystone support, as provided in Service Description Supplement.

1.4. Features.

1.4.1. Unified and AFX Storage DST include use of all *ONTAP One* features on STaaS Products.

1.4.2. Block Optimized DST includes use of all *ONTAP One for SAN* features on STaaS Products.

1.4.3. Object Storage Data Type includes use of all StorageGRID features on STaaS Products.

1.5. Services.

STaaS Services include the following services, which will be performed by NetApp or NetApp authorized partner or sub-contractor, as applicable:

1.5.1. **STaaS Products**. Size, select and provide the STaaS Products required to deliver STaaS Services, including power cords and SR-SFPs for, and network cabling between STaaS Products. NetApp will determine the STaaS Products used to deliver such STaaS Services, which may be changed or not changed, from time-to-time, at NetApp's expense, irrespective of any published EOA/EOS.

1.5.2. **Site Requirements**. Provide End User Site preparation requirements.

1.5.3. **Shipping**. Provide initial and final return shipping of STaaS Products.

1.5.4. **Installation**. Provide installation for initial, add-on, and updates of STaaS Products.

1.5.5. **Activation**. Enable monitoring, metering, invoicing, and support and make STaaS Services available for use.

1.5.6. **Metering/Monitoring**. Perform capacity consumption metering and basic health and performance monitoring of STaaS Products and STaaS Services using the Monitoring Tool.

1.5.7. **Reporting**. Provide Capacity Report through the Monitoring Tool or with each invoice.

1.5.8. **Notification**. Notify End User of basic incidents that may affect delivery or use of STaaS Services through the Monitoring Tool.

1.5.9. **Technical Support.** Provide technical support by email or telephone.

1.5.10. **On-Site Parts Delivery, Replacement, Support**. Deliver parts and/or send authorized engineers to End User Site, as required.

1.5.11. **Capacity, Health, and Performance management**. Manage STaaS Products to deliver STaaS Services.

1.5.12. **Updates**. Identify, plan, and optionally install, in coordination with End User, updates and patches required for STaaS Services.

1.5.13. **Return**. At Subscription Term expiration, provide packaging (if required), deinstall STaaS Products and arrange for return to NetApp, and sanitize media and reset STaaS Products to factory settings upon return to NetApp facility.

1.6. Keystone Success Management.

1.6.1. STaaS Services include remote Keystone Success Management ("KSM") service, available during local business hours, providing:

1.6.2. Conduct, as needed, STaaS Services specific review calls that may include:

- General questions regarding STaaS services.
- Subscription consumption and planning.
- STaaS Products maintenance and update planning.
- Invoice review.

- Incident review.
- STaaS escalation management.

2. Additional STaaS Services

The following additional services (each, an "**Additional STaaS Service**") are available, for additional Fees, as may be further described in the Quote:

2.1. MetroCluster (may also be referred to as "Advanced Data Protection" or "ADP").

- Provides MetroCluster™ IP synchronous mirroring feature on supported Unified DST only, AFF storage arrays.
- Requires ordering of following Additional STaaS Services:
- Networking (if switches are needed).
- Keystone Supplemental Services (if MetroCluster IP design or deployment services are needed).

2.2. Burst Capacity Limit.

- Provides selection of Burst Capacity Limit of 40% or 60% of Committed Capacity.
- Supported on Unified and Block Optimized DST only.

2.3. Data Infrastructure Insights (DII) for Keystone.

- Provides DII license for Keystone infrastructure only.

2.4. Data tiering to non-NetApp targets.

- Provides FabricPool data tiering to supported non-NetApp data storage targets.
- Supported on Unified DST only.

2.5. Expedited Activation (one-time charge applied to first invoice).

- Provides expedited handling, delivery, installation, and activation of STaaS Services.

2.6. Keystone Supplemental Services (charge applied to next invoice following delivery).

- Provides additional remote and/or on-site services for STaaS Services or Products.

2.7. Networking.

Not applicable for AFX DST.

- Provides a switch, including support, deployment, cables for connectivity between Keystone products only, and short range SFPs for provided switches, for cluster interconnect, MetroCluster IP, or storage networking use only or
- Provides one StorageGRID service appliance, including support and deployment.

2.8. Non-returnable Drive ("NRD").

- Provides for End User to retain replaced media, identified by NetApp as defective, during Subscription Term.

2.9. Non-returnable – Non-Volatile Components ("NR-NVC").

- Provides option for End User to retain replaced media identified by NetApp as being defective during Subscription Term.
- Provides option for End User to retain, at the end of the subscription term, the hardware provided by NetApp as part of End User's Keystone subscription, including, for example, functional non-volatile memory components switches, racks, compute nodes, cabling, power components, and other memory components, as provided in the Quote. End User agrees that if components covered by the NR-NVC option are returned to NetApp, Section 6.3(b) of the Keystone Terms ("End User Must Remove End User Data") will apply.

- Non-volatile components include (A) storage media (hard drives and SSDs) and (B) non-volatile memory components that contain End User data and whose contents cannot be erased or sanitized by removing power or discharging battery or executing firmware or software commands provided by NetApp.

2.10. Physical Capacity Metering.

- Provides for consumption metering based on Useable Capacity for Unified and Block Optimized DST.
- ONTAP version 9.14.1 or greater required.

2.11. US Citizen Support ("USCS").

- Provides installation, parts replacement, support, and KSM services from U.S. citizens on U.S. soil, where geographically available.

3. Order

3.1. Order type.

Keystone Services provide two, non-convertible order types:

- On-Premises Service.
- Hybrid Cloud Service.

3.2. Subscription Term.

- STaaS On-Premises Service offers up to 5-year Term.
- STaaS Hybrid Cloud Service offers up to 3-year Term with co-termination of On-Premises Service and CVO.

3.3. Start Date.

Date on which Subscription Term starts and Fees begin to accrue that is the earlier of, either:

- Date on which NetApp notifies End User that STaaS Services have been activated and available for use.
- 30 days from STaaS Products ship date, if STaaS Services cannot be activated within 30 days after STaaS Products ship date due to End User delays, as determined by NetApp.

4. Fees

4.1. Capacity Reports

NetApp will use the Capacity Reports to calculate the Fees due under each invoice for STaaS Services and such Capacity Reports will be deemed to contain the final and conclusive summary of the Consumed Capacity used by End User during the applicable billing period, unless End User can establish that such Capacity Report contains a material error. The Consumed Capacity will be based on data available from AutoSupport and/or the Keystone Collector Agent, as detailed below.

Should any data not be available from the Monitoring Tools for producing an invoice for a particular billing period ("Billing Period"), data from Data Infrastructure Insights will be used, if available and purchased to provide an the Consumed Capacity. If data for a Billing Period is unavailable through the Monitoring Tools and also Data Infrastructure Insights, Consumed Capacity for such period will be, for the purpose of invoicing for that Billing Period, End User's 60 day rolling average usage (from the Monitoring Tools) for the timeframe immediately prior to the period. Should the subscription be less than 60 days, the rolling average usage over any time frame available will be used to calculate the Consumed Capacity. In event NetApp is able to obtain data from the Monitoring Tools after the invoice for the Billing Period is generated, and the previously calculated Consumed Capacity is greater than the Consumed Capacity as calculated with the Monitoring Tools, NetApp will provide a credit for the difference.

4.2. Minimum Payment.

Each Order is subject to a Minimum Payment amount that is payable during the applicable billing period identified in the Order.

4.3. Hybrid Cloud Service.

- Minimum payment for Hybrid Cloud Service may include an amount based on metered Provisioned Capacity of all CVO volumes.
- Fees payable by End User for Hybrid Cloud Service do not include AWS, Azure, or other cloud service provider charges, which must be paid by End User and cloud services connectivity maintained for so long as CVO is being used.

4.4. Total Fees.

The total Fees payable for a billing period are determined for each billing period and will include Minimum Payments, additional usage-based consumption charges for any Burst Capacity as described in Section 1.2, and/or fixed rate charges.

5. Invoicing

Fees payable for a billing period will be included in a single invoice and will identify the components of such Fees. End User will be invoiced in accordance with the invoice period selected in the Order.

Time Period	When billed	Product(s)	
		On-Premises Service	Hybrid Cloud Service
Monthly*	In arrears	✓	✓
Annual	In advance	✓	-
Quarterly	In advance	✓	-
Semi-Annual	In advance	✓	-

* First and last month invoices may be pro-rated, on per day basis, if Start Date is not first of month.

6. Subscription Modifications

6.1. Committed Capacity Change

End User may request a change in Committed Capacity of an existing Performance Level or add a new Performance Level at any time during the Subscription Term, and NetApp will provide End User with confirmation of such increase. End User may not request change to the Committed Capacity, and NetApp has no obligation to confirm such change, where such request falls within the final ninety (90) days of the related Subscription Term, unless the parties have agreed in writing to renew or otherwise extend the Subscription Term prior to or during such final 90-day period. Decreases to the Committed Capacity or to the Minimum Payments are not allowed except in certain circumstances explicitly set forth in the Service Description. Changes (increase or decrease) may only be made in the increments described in the respective Performance Service Level table.

6.1.1. Committed Capacity Increase.

6.1.1.1. Up to 90 days prior to the scheduled expiration of the Subscription Term, End User may request an increase to Committed Capacity of an existing Storage Array or an AFX Cluster, in increments specified in Section 1.3.1.

6.1.1.2. Once activation of additional Committed Capacity is communicated to End User, any increases will remain in effect for the remainder of the Subscription Term (unless subsequently changed as described herein), and the Minimum Payment will be revised to reflect the increase.

6.1.1.3. Where End User has selected in advance billing, NetApp will promptly invoice End User for any pro-rated increases in Minimum Payments owed for the remainder of current invoice period.

6.1.2. Committed Capacity Decrease.

6.1.2.1. Applicable to Keystone On-Premises Service only. If End User has selected a Subscription Term of at least 24 months, End User may decrease the Committed Capacity subject to certain limits for capacity decrease amounts and Minimum Payments set forth in the Service Description Supplement.

6.2. Spend Reallocation.

6.2.1. In Hybrid Cloud Service only, End User can reallocate On-Premises Service spend to CVO spend quarterly (up to 25% of then current annual contract value).

6.2.2. Post reallocation, On-Premises Service monthly Minimum Payment per Order must be greater than $16,666 (or US currency equivalent).

7. Monitoring Tool

Keystone Services require full and continuous enablement of each of:

7.1. NetApp ONTAP AutoSupport® (ASUP), on each Storage Array or AFX storage controller, configured to send usage information daily, and

7.2. Keystone Collector Agent, deployed on End User provided and managed virtual machines, at each End User Site.

8. End User Responsibilities

8.1. Administration and operation.

End User is responsible for the administration and operation of the STaaS Products, including, but not limited to the following.

- Configuration, use, operations, and management of ONTAP or StorageGRID features.
- Storage Array capacity and resources consumption resulting from ONTAP or StorageGRID feature(s) use.
- ONTAP data storage virtual machine configuration.
- End User specific patch identification and installation.
- Storage Provisioning.
- Equipment moves during subscription term (after notifying and upon gaining NetApp approval).
- Enhanced reporting or monitoring of STaaS Products.
- Prior to shipment of STaaS Products, providing to NetApp relevant End User Site, technical, workload, operations, and other relevant requirements to determine proper Keystone Order configuration and STaaS Products selection. Changes to any requirements after Order placement may impact rates or incur additional Fees.
- Maintaining (and not disabling or interfering with) the Monitoring Tools.
- Making, at times during the Subscription Term during End User's regular business hours, all STaaS Products available for physical and logical inspection, with reasonable prior notice, subject to End User's reasonable security procedures.

8.2. Data protection, security, and management.

End User is responsible for designing, configuring, administering, and maintaining:

- Physical, network, and access security.
- Data-at-rest and data-in-flight encryption.
- All aspects of End User data backup and recovery and business continuity/disaster recovery.
- Integration and/or automation of the STaaS Services with End User environment or applications.
- Adherence to End User applicable industry or government compliance requirements.
- Data migration to/from STaaS Products.

8.3. Subscription expiration, cancellation, termination.

NetApp is not responsible for access to, availability, or loss of End User data on STaaS Products after end of Subscription Term. By end of Subscription Term, End User must:

- Discontinue use of STaaS Services.
- Backup, migrate, delete, and/or sanitize media (without rendering media unusable), if and as required by NetApp.
- Notify NetApp that STaaS Services can be deactivated and schedule deinstallation date (within 15 days of end of Subscription Term).
- Transport packaged items to End User shipping area for return pickup.

- All effort, hardware, software, or services related to transferring End User data from STaaS Services are not included as part of STaaS Services or Fees.
- End User may receive an extension of STaaS Services beyond the Subscription Term, for express purpose of an orderly transfer of End User data out of STaaS Services, contingent on NetApp approval. The following terms and conditions apply:
    - End User must provide a written request to NetApp at least 90 days prior to expiration of the current Subscription Term.
    - Allowance is made for a period of one calendar month, at pro-rated, on per day basis fees.

9. **Keystone Additional Services**

9.1. Cluster Expansion (may also be referred to as Commingling).

If (a) Cluster Expansion is required but products or services required for Cluster Expansion are not to be provided as part of the STaaS Services or (b) additional products or services are required but not identified above, End User must provide all necessary products and services to facilitate such Cluster Expansion or purchase them directly from NetApp or Partner via a separate quote/PO.

9.2. Data Infrastructure Insights for Keystone.

9.2.1. End User may access and use DII for Keystone and download use any NetApp Software that is necessary to facilitate End User's use of DII for Keystone. Such right of access and use is non-exclusive, non-transferable, non-sublicensable, and revocable.

9.2.2. Provision and use of DII for Keystone is subject to:

9.2.2.1. additional terms specific to DII for Keystone as attached to the applicable Order and

9.2.2.2. the Documentation as found at at Data Infrastructure Insights Documentation.

9.3. Professional and Managed Services.

9.3.1. Provision and use of NetApp Managed Services on a Keystone Order is subject to :

- additional terms specific to Managed Services with Keystone as found at Managed Services for NetApp Keystone Service Description and
- Professional Services Terms.

9.3.2. Provision and use of NetApp Professional Services on a Keystone Order is subject to:

- additional terms specific to Data Migration-as-a-Service, Time and Materials, and/or Keystone Plus; and
- Professional Services Terms.

9.4. Support Account Management (SAM).

- Provision and use of SAM Services is subject to NetApp Support Services Terms and the applicable SAM offering description. See the SAM Service Description for more information.

10. **DEFINITIONS**.

Capitalized terms not specifically defined in this Service Description have the same meaning as in the Keystone STaaS Terms. In addition, the following definitions apply to this Service Description.

10.1. "**Additional Keystone Services**": the optional services that are available as part of the STaaS Services, subject to additional fee amounts, conditions, and availability, with further details provided in Section 2.

10.2. "**AFX**": NetApp disaggregated storage platform.

10.3. "**AFX Cluster**": the collection of AFX storage controllers and AFX storage shelves connected to same AFX storage network.

10.4. "**Burst Capacity Limit**": the amount of Usable Capacity, beyond Committed Capacity per Order, with further details provided in Section 1.2.3.1.

10.5. "**Burst Waiver Period**": the number of days, beginning from the Start Date, for which Burst Capacity usage will be metered and reported, but not charged, with further details provided in Section 1.2.3.3.

10.6. "**Consumed Capacity**": The amount of capacity used and metered to store End User Data.

10.7. "**CVO**": NetApp's Cloud Volumes ONTAP® software.

10.8. "**Cluster Expansion**": the incorporation of STaaS Products and non-STaaS Products in the same ONTAP cluster or StorageGRID® grid. Cluster Expansion is also referred to as "Commingling".

10.9. **"Data Infrastructure Insights**" or **"DII":** NetApp's hybrid multi-cloud infrastructure monitoring, analysis, insights, and optimization tool, as described in https://docs.netapp.com/us-en/data-infrastructure-insights/, as may be updated from time to time.

10.10. "**Data Storage Type**" or "**DST**": one of the following data storage methods: Unified (File, Block, S3 Object), Block Optimized, Object, or AFX.

10.11. "**Effective Capacity**": the amount of storage capacity equal to the Usable Capacity multiplied by a data efficiency factor (>= 1).

10.12. "**End User Data**": any information or data provided by or on behalf of End Users and stored within the STaaS Products, including, for example, all copies, mirrored copies, versions, and clones.

10.13. "**Hybrid Cloud Service**": On-Premises Service and, optionally, CVO ordered on a single, co-termed Order and charged on Keystone invoice, with ability to reallocate spend from On-Premises Service to CVO.

10.14. "**IOPs**": input/output operations per second.

10.15. "**Monitoring Tool**": One or more of the required NetApp proprietary tools that monitors and transmits STaaS Service consumption data to enable reporting, invoicing, and STaaS Products' capacity, health, performance, and support metrics to enable management and support of Keystone Products. Monitoring Tools are AutoSupport and/or Keystone Collector Agent. The Monitoring Tool connects to and communicates only with the management plane of the StaaS Products. The Monitoring Tool does not connect to or communicate with the End User data plane, nor does it have access to, operate on, or process End User data transferred to or stored on STaaS Services.

10.16. "**On-Premises Service**": Keystone STaaS delivered through STaaS Products deployed at End User Site.

10.17. "**Performance Service Level**" or "**PSL**": one of the Performance Service Levels of a given Data Storage Type, defined in Section 1.3.1.

10.18. "**Provisioned Capacity**": Capacity allocated to volumes for use by applications, regardless of actual Usable Capacity or Effective Capacity.

10.19. "**Secure Site**": End User Site with limited or no ability to provide internet access or install or enable Monitoring Tools for metering, monitoring, or support purposes.

10.20. "**Service Level**": one of the service levels described in Section 1.3.

10.21. "**Start Date**": as defined in Section 3.3.

10.22. "**Service Level Agreement**" or "**SLA**": a guarantee provided for meeting a Service Level Objective.

10.23. "**Service Level Objective**" or "**SLO**": the quantification and delivery goal of a performance metric objective.

10.24. "**Storage Array**": a data storage device consisting of two storage controllers ("H/A pair") and dedicated internal and/or externally attached storage media.

10.25. "**Storage Instance**": a single Storage Array or single AFX Cluster.

10.26. "**Target Start Date**": date on which End User is targeting start of STaaS Services.

10.27. "**Usable Capacity**": the amount of data storage capacity based on quantity and size of physical media blocks, before any Storage Instance data efficiencies, available to store End User data.