

Matricea de conformitate pentru Enterprise Storage Systems (Sisteme de stocare)

(Se completează de către operatorul economic)

Tabel de autoevaluare și verificare a cerințelor tehnice

Instrucțiuni generale pentru ofertanți: Pentru fiecare cerință, furnizați referințe specifice la documentația tehnică care justifică conformitatea. Includeți numerele de pagină, referințele capitolelor și/sau linkuri web directe către documentația oficială a producătorului.

No.	Category / Requirement	Proposed Model / Component / Configuration	Technical Documentation Reference	Page / Chapter	Manufacturer's Web Link	Self evaluation compliance Status
1. GENERAL REQUIREMENTS						
1.1	New and non-refurbished equipment (manufactured min. Q1 2025)	NetApp ASA A50 ONTAP ONE Software Storage System	Datasheet: NetApp_ASA_A50.pdf	Page 1 to 5.	https://docs.netapp.com/us-en/ontap-systems/asa-r2-key-specifications/asa-a50-key-specifications.html#key-capacity-memory-form-factor-and-ontap-version-specifications	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
1.2	Enterprise-grade from recognized international manufacturer	NetApp ASA A50 ONTAP ONE Software Storage System	Datasheet: NetApp_ASA_A50.pdf	https://docs.netapp.com/us-en/asa-r2/get-started/learn-about.html	https://docs.netapp.com/us-en/asa-r2/get-started/learn-about.html	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
1.3	Mutually compatible components, manufacturer certified	NetApp ASA A50 ONTAP ONE Software Storage System	Datasheet: NetApp_ASA_A50.pdf	https://docs.netapp.com/us-en/asa-r2/get-started/learn-about.html	https://docs.netapp.com/us-en/asa-r2/get-started/learn-about.html	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A

No.	Category / Requirement	Proposed Model / Component / Configuration	Technical Documentation Reference	Page / Chapter	Manufacturer's Web Link	Self evaluation compliance Status
1.4	Rack-mountable 2U-4U, EIA-310 standard compliant	NetApp ASA A50, 2U chassis. ONTAP ONE Software	Datasheet: NetApp_ASA_A50.pdf	https://docs.netapp.com/us-en/asa-r2/get-started/learn-about.html	https://docs.netapp.com/us-en/asa-r2/get-started/learn-about.html	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
1.5	Complete mounting kit (rails and brackets included)	Included: Rackmount kit	X5532A-N-C Rail,4-Post,Thin,Rnd/Sq-Hole,Sm,Adj,24-32,-C	Chapter: Step 2: Unpack the boxes	https://docs.netapp.com/us-en/asa-r2/install-setup/prepare-hardware.html#step-1-prepare-the-site	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
2. ARCHITECTURE & AVAILABILITY						
2.1	Symmetric Active-Active controller architecture	NetApp ASA A50 Storage System	Datasheet: NetApp_ASA_A50.pdf	Page 2, chapter Access your data with continuous availability Page 5, Table 2 ASA Software	https://www.netapp.com/media/13742/6-tr-5009-best-practices-for-netapp-asa.pdf page 3, page 8, page 13	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A

2.2	Minimum guaranteed availability 99.9999%	NetApp ASA A50 ONTAP ONE Software Storage System	Datasheet: NetApp_ASA_A50.pdf	Page 2, Key Benefits	https://www.netapp.com/media/85736-ds-4254-asa.pdf	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
2.3	Write cache remains active during controller failure	NetApp ASA A50 ONTAP ONE Software Storage System	https://kb.netapp.com/on-prem/ontap/Perf/Perf-KBs/What_is_Consistency_Point_and_why_does_NetApp_use_it	https://kb.netapp.com/on-prem/ontap/Perf/Perf-KBs/What_is_Consistency_Point_and_why_does_NetApp_use_it Chapter: Answer	https://kb.netapp.com/on-prem/ontap/Perf/Perf-KBs/What_is_Consistency_Point_and_why_does_NetApp_use_it Chapter: Answer	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
2.4	System operational with single controller (50% failure tolerance)	NetApp ASA A50 ONTAP ONE Software Storage System	https://docs.netapp.com/us-en/ontap/san-admin/learn-about-asa.html	https://docs.netapp.com/us-en/ontap/san-admin/learn-about-asa.html#set-up-an-asa ASA platforms use symmetric active-active for multipathing. All paths are active/optimized so in the event of a storage failover, the host does not need to wait for the ALUA transition of the failover paths to resume I/O. This reduces time to failover.	https://docs.netapp.com/us-en/ontap/san-admin/learn-about-asa.html#set-up-an-asa	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
2.5	Non-disruptive software updates	NetApp ASA A50 ONTAP ONE Software Storage System	https://docs.netapp.com/us-en/asa-r2/administer/upgrade-ontap.html	https://docs.netapp.com/us-en/asa-r2/administer/upgrade-ontap.html	https://docs.netapp.com/us-en/asa-r2/administer/upgrade-ontap.html	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A

			error-in-the-automated-upgrade-process			
3. FAULT TOLERANCE						
3.1	Continuous operation - power line failure tolerance	NetApp ASA A50 ONTAP ONE Software Storage System	Datasheet: NetApp_ASA_A50.pdf	Page 2: Access your data with continuous availability: ASA systems provide continuous access to data during unplanned outages by using symmetric, active-active multipathing. With both active controllers capable of communicating to a LUN, multipathing gives you uninterrupted access to your data with rapid failover recovery.	https://www.netapp.com/media/85736-ds-4254-asa.pdf	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
3.2	Automatic failover - any controller failure	NetApp ASA A50 ONTAP ONE Software Storage System	Datasheet: NetApp_ASA_A50.pdf	Page 2: Access your data with continuous availability: ASA systems provide continuous access to data during unplanned outages by using symmetric, active-active multipathing. With both active controllers capable of communicating to a LUN, multipathing gives you uninterrupted access to your data with rapid failover recovery.	https://www.netapp.com/media/85736-ds-4254-asa.pdf	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A

3.3	Data integrity - 2 simultaneous drive failures	NetApp ASA A50 ONTAP ONE Software Storage System	https://www.netapp.com/media/67355-wp-7354.pdf	https://www.netapp.com/media/67355-wp-7354.pdf Page 29: ONTAP Features ONTAP protects against the risk of data loss due to drive failure by using specialized RAID protection options. NetApp RAID-TEC™ uses triple parity, which allows ONTAP to use up to three spare disks to replace and reconstruct the data from up to three simultaneously failed disks within the RAID group. NetApp RAID DP® uses double-parity, which allows ONTAP to use up to two spare disks to replace and reconstruct the data from up to two simultaneously failed disks within the RAID group.	https://www.netapp.com/media/67355-wp-7354.pdf	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
3.4	Traffic rerouting - FC or iSCSI port failure	NetApp ASA A50 ONTAP ONE Software Storage System	https://docs.netapp.com/us-en/ontap/san-admin/learn-about-asa.html	https://docs.netapp.com/us-en/ontap/san-admin/learn-about-asa.html#set-up-an-asa ASA platforms use symmetric active-active for multipathing. All paths are active/optimized so in the event of a storage failover, the host does not need to wait for the ALUA transition of the failover paths to resume I/O. This reduces time to failover.	https://docs.netapp.com/us-en/ontap/san-admin/learn-about-asa.html#set-up-an-asa	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
4. STORAGE CAPACITY						
4.1	Minimum 200 TB usable capacity (before data reduction)	NetApp ASA A50 ONTAP ONE Software	18x15.3TB,NVMe4,SED (X4028A-2-A-C) 216TB of usable space in RAID-DP configuration. Performance_report.pdf.	Performance_report.pdf.	Performance_report.pdf.	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A

4.2	Enterprise SSD with TLC/eTLC technology or equivalent	NetApp ASA A50 ONTAP ONE Software	https://www.netapp.com/media/85630-tr-4969.pdf	Page 4, chapter Read latency – storage • A-Series controllers with TLC media can deliver read latencies approaching 100µs.	https://www.netapp.com/media/85630-tr-4969.pdf	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
5. CONTROLLERS						
5.1	Minimum 2 redundant controllers in HA configuration	NetApp ASA A50 ONTAP ONE Software	Dual controller system, in HA configuration.	https://docs.netapp.com/us-en/ontap/san-admin/learn-about-asa.html#set-up-an-asa ASA platforms use symmetric active-active for multipathing. All paths are active/optimized so in the event of a storage failover, the host does not need to wait for the ALUA transition of the failover paths to resume I/O. This reduces time to failover.	https://docs.netapp.com/us-en/ontap/san-admin/learn-about-asa.html#set-up-an-asa https://www.netapp.com/media/85736-ds-4254-asa.pdf	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
5.2	Active-Active configuration with balanced workload	NetApp ASA A50 ONTAP ONE Software	Dual controller system, in HA configuration.	https://docs.netapp.com/us-en/ontap/san-admin/learn-about-asa.html#set-up-an-asa ASA platforms use symmetric active-active for multipathing. All paths are active/optimized so in the event of a storage failover, the host does not need to wait for the ALUA transition of the failover paths to resume I/O. This reduces time to failover.	https://docs.netapp.com/us-en/ontap/san-admin/learn-about-asa.html#set-up-an-asa https://www.netapp.com/media/85736-ds-4254-asa.pdf	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A

5.3	Hot-swappable controllers	NetApp ASA A50 ONTAP ONE Software	https://docs.netapp.com/us-en/ontap-systems/a20-30-50/io-module-hotswap-ha-slot4.html#step-1-ensure-the-storage-system-meets-the-procedure-requirements	Hot-swap an I/O module used for cluster and HA traffic - AFF A20, AFF A30, and AFF A50	https://docs.netapp.com/us-en/ontap-systems/a20-30-50/io-module-hotswap-ha-slot4.html	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
6. RAID & DATA PROTECTION						
6.1	RAID 6 support (2 disk failure tolerance)	NetApp ASA A50 ONTAP ONE Software	Supports NetApp RAID-DP (2 disk failure tolerance) and RAID-TEC (3 disk failure tolerance)	https://docs.netapp.com/us-en/ontap/disks-aggregates/default-raid-policies-aggregates-concept.html RAID-DP provides double-parity protection in the event of a single or double disk failure. RAID-DP is the default RAID policy for the following local tier types: <ul style="list-style-type: none"> • All Flash local tiers • Flash Pool local tiers • Performance hard disk drive (HDD) local tiers 	https://docs.netapp.com/us-en/ontap/disks-aggregates/default-raid-policies-aggregates-concept.html	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
6.2	Optional RAID 5, RAID 10 or equivalent	Not applicable	Not applicable	Not applicable	Not applicable	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
7. CACHE (if applicable)						

7.1	Minimum 256 GB cache total per controller	Not Applicable to NetApp ASA A50	https://kb.netapp.com/on-prem/ontap/Perf/Perf-KBs/What_is_Consistency_Point_and_why_does_NetApp_use_it Chapter: Answer	https://kb.netapp.com/on-prem/ontap/Perf/Perf-KBs/What_is_Consistency_Point_and_why_does_NetApp_use_it Chapter: Answer	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A	
7.2	Protected cache (mirroring or battery backup)	NetApp ASA A50 ONTAP ONE Software	https://www.netapp.com/media/137426-tr-5009-best-practices-for-netapp-asa.pdf best-practices-for-netapp-asa.pdf	https://www.netapp.com/media/137426-tr-5009-best-practices-for-netapp-asa.pdf Page 21, Solution availability and ONTAP life-cycle management: In-flight data is protected using NVRAM, allowing data to be safely written even in the event of a power outage	https://www.netapp.com/media/137426-tr-5009-best-practices-for-netapp-asa.pdf	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
7.3	Optimized for IOPS and low latency	NetApp ASA A50 ONTAP ONE Software Storage System	Datasheet: NetApp_ASA_A50.pdf	Page 3, Build a trusted SAN environment with ASA solution that: • Support both NVMe/FC and NVMe/TCP, providing low latency and millions of IOPS in a cluster.	https://www.netapp.com/media/85736-ds-4254-asa.pdf	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
8. PERFORMANCE						
8.1	Minimum 300,000 IOPS with inline data reduction	NetApp ASA A50 ONTAP ONE Software	Performance_report.pdf. Page 2, Proposed Solution Summary 460,148 IOPS / 7,189.81 MB/s	Performance_report.pdf. Page 2, Proposed Solution Summary 460,148 IOPS / 7,189.81 MB/s	-	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A

8.2	Performance parameters: 70% read/30% write, 16KB block	NetApp ASA A50 ONTAP ONE Software	Performance_report.pdf. Page 11, Workload description	Performance_report.pdf. Page 11, Workload description	-	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
8.3	Maximum 1 ms latency under full load	NetApp ASA A50 ONTAP ONE Software	Performance_report.pdf. Page 11, Workload description	Performance_report.pdf. Page 11, Workload description	-	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
8.4	Performance validation with vendor benchmark tools	NetApp ASA A50 ONTAP ONE Software	NetApp Fusion Sizing tool.	NetApp Fusion Sizing tool.	-	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
9. SUPPORTED PROTOCOLS						
9.1	Mandatory: FC and iSCSI	NetApp ASA A50 ONTAP ONE Software	Included, per controller: X60140A-C IO Module,4 Port FC Target+Init,32G with SFP,-C X60130A-C IO Module,2 Port,100Gb Ethernet with SFP,-C	Included, per controller: X60140A-C IO Module,4 Port FC Target+Init,32G with SFP,-C X60130A-C IO Module,2 Port,100Gb Ethernet with SFP,-C	Included, per controller: X60140A-C IO Module,4 Port FC Target+Init,32G with SFP,-C X60130A-C IO Module,2 Port,100Gb Ethernet with SFP,-C	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
9.2	Optional: NVMe/FC, NVMe/TCP	NetApp ASA A50 ONTAP ONE Software Storage System	Datasheet: NetApp_ASA_A50.pdf FC, iSCSI, NVMe/FC, NVMe/TCP	Page 5, ASA Software	https://www.netapp.com/media/85736-ds-4254-asa.pdf	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A

9.3	Multipath I/O for all protocols	NetApp ASA A50 ONTAP ONE Software Storage System	Datasheet: NetApp_ASA_A50.pdf FC, iSCSI, NVMe/FC, NVMe/TCP	Page 5, ASA Software	https://www.netapp.com/media/85736-ds-4254-asa.pdf	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
10. REPLICATION & CLUSTERING						
10.1	Synchronous replication for Active-Active between 2 locations up to 300m	NetApp ASA A50 ONTAP ONE Software Active Sync Replication	https://docs.netapp.com/us-en/ontap/snapmirror-active-sync/architecture-concept.html#symmetric-activeactive	Symmetric active/active is targeted for clustered applications including VMware Metro Storage Cluster, Oracle RAC, and Windows Failover Clustering with SQL. Mediator is included in configuration: represents a virtual appliance, no licensing needed or other payments.	https://docs.netapp.com/us-en/ontap/snapmirror-active-sync/architecture-concept.html#symmetric-activeactive	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
10.2	Zero RPO (Recovery Point Objective)	NetApp ASA A50 ONTAP ONE Software Active Sync Replication	https://docs.netapp.com/us-en/ontap/snapmirror-active-sync/#benefits	https://docs.netapp.com/us-en/ontap/snapmirror-active-sync/#benefits	https://docs.netapp.com/us-en/ontap/snapmirror-active-sync/#benefits	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
10.3	Flexible replication for 1 or more LUNs	NetApp ASA A50 ONTAP ONE Software Active Sync Replication	https://docs.netapp.com/us-en/ontap/snapmirror-active-sync/index.html NetApp SnapMirror active sync (SM-as) is designed to be a more granular, lower-cost, easier-to-use application-	https://docs.netapp.com/us-en/ontap/snapmirror-active-sync/index.html	https://docs.netapp.com/us-en/ontap/snapmirror-active-sync/index.html	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A

			level protection with automatic failover. SnapMirror active sync enables mission-critical business services to keep operating, even during a complete site failure. With SnapMirror active sync, you can now synchronously replicate multiple volumes of an application (by adding them to a consistency group) between sites at geographically dispersed locations. You can automatically failover to the secondary copy in case of disruption of the primary, thus enabling business continuity for tier one applications.			
11. DATA REDUCTION FEATURES						
11.1	Inline deduplication at block and volume level	NetApp ASA A50 ONTAP ONE Software	https://docs.netapp.com/us-en/ontap/concepts/storage-efficiency-overview.html	Chapter: ONTAP storage efficiency technologies include:	https://docs.netapp.com/us-en/ontap/concepts/storage-efficiency-overview.html	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
11.2	Inline compression	NetApp ASA A50 ONTAP ONE Software	https://docs.netapp.com/us-en/ontap/concepts/storage-efficiency-overview.html	Chapter: ONTAP storage efficiency technologies include:	https://docs.netapp.com/us-en/ontap/concepts/storage-efficiency-overview.html	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A

11.3	No restrictions on other functionalities	NetApp ASA A50 ONTAP ONE Software	https://docs.netapp.com/us-en/ontap/concepts/storage-efficiency-overview.html	Chapter: ONTAP storage efficiency technologies include:	https://docs.netapp.com/us-en/ontap/concepts/storage-efficiency-overview.html	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
11.4	Complete licensing on perpetual basis included	NetApp ASA A50 ONTAP ONE Software	Datasheet: NetApp_ASA_A50.pdf	Page 5, ASA Software	https://www.netapp.com/media/85736-ds-4254-asa.pdf	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
12. SNAPSHOTS						
12.1	Minimum 365 snapshots per volume	NetApp ASA A50 ONTAP ONE Software	https://kb.netapp.com/on-prem/ontap/Ontap_OS/OS-KBs/Maximum_number_of_snapshots_supported_by_ONTAP	Chapter: Answer Starting with ONTAP 9.4, the maximum number of snapshots has been increased Beginning with ONTAP 9.4, a volume can contain up to 1023 Snapshot copies.	https://kb.netapp.com/on-prem/ontap/Ontap_OS/OS-KBs/Maximum_number_of_snapshots_supported_by_ONTAP	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
12.2	Delta storage only (space-efficient)	NetApp ASA A50 ONTAP ONE Software	https://docs.netapp.com/us-en/ontap/concepts/snapshot-copies-concept.html	A snapshot (formerly Snapshot copy) is a read-only, point-in-time image of a volume. After a snapshot is created, the active file system and the snapshot point to the same disk blocks; therefore, the snapshot doesn't use extra disk space. Over time, the image consumes minimal storage space and incurs negligible performance overhead because it records	https://docs.netapp.com/us-en/ontap/concepts/snapshot-copies-concept.html	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A

				only changes to files since the last snapshot was made.		
12.3	No performance impact (degradation)	NetApp ASA A50 ONTAP ONE Software	https://docs.netapp.com/us-en/ontap/concepts/snapshot-copies-concept.html	ONTAP compares pointer information in the snapshot with data on disk to reconstruct the missing or damaged object, without downtime or a significant performance cost.	https://docs.netapp.com/us-en/ontap/concepts/snapshot-copies-concept.html	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
13. SECURITY						
13.1	AES-256 encryption for all stored data	NetApp ASA A50 ONTAP ONE Software	https://docs.netapp.com/us-en/ontap/concepts/encryption-concept.html#netapp-storage-encryption	Chapter: NVMe self-encrypting drives disks use AES 256-bit transparent disk encryption to protect data at rest	https://docs.netapp.com/us-en/ontap/concepts/encryption-concept.html#netapp-storage-encryption	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
13.2	Hardware-accelerated encryption without performance impact	NetApp ASA A50 ONTAP ONE Software	https://kb.netapp.com/on-prem/ontap/DM/Encryption/Encryption-KBs/Is_there_any_performance_impact_when_using_hardware_based_NSE_encryption	Answer NSE encryption is hardware-based, meaning it is provided by self-encrypting disks. There is zero performance impact, as all encryption is done by hardware of the disks themselves.	https://kb.netapp.com/on-prem/ontap/DM/Encryption/Encryption-KBs/Is_there_any_performance_impact_when_using_hardware_based_NSE_encryption	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
13.3	Secure encryption key management	NetApp ASA A50 ONTAP ONE Software	https://docs.netapp.com/us-en/ontap/encryption-at-rest/enable-onboard-key-management-96-later-nse-task.html	The Onboard Key Manager stores keys in volatile memory. Volatile memory contents are cleared when the system is rebooted or halted. Under normal operating conditions, volatile memory contents will be	https://docs.netapp.com/us-en/ontap/encryption-at-rest/enable-onboard-key-management-96-later-nse-task.html	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A

				cleared within 30s when a system is halted.		
14. MONITORING & MANAGEMENT						
14.1	Web-based monitoring and management platform	NetApp ASA A50 ONTAP ONE Software	https://docs.netapp.com/us-en/active-iq-unified-manager-99/install-vapp/concept-introduction-to-unified-manager.html	Active IQ Unified Manager included in offer (actually is free)(formerly OnCommand Unified Manager) enables you to monitor and manage the health and performance of your ONTAP storage systems from a single interface. You can deploy Unified Manager on a Linux server, on a Windows server, or as a virtual appliance on a VMware host.	https://docs.netapp.com/us-en/active-iq-unified-manager-99/install-vapp/concept-introduction-to-unified-manager.html	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
14.2	Real-time monitoring (space, performance, hardware status), etc	NetApp ASA A50 ONTAP ONE	https://www.netapp.com/blog/active-iq-unified-manager/	<p>Chapter: Why This Matters to You?</p> <p>Easily view real-time events and topological representations of key components with an intuitive control panel.</p> <p>Built-in analytics with easy to use metrics to understand and optimize storage operations and performance.</p> <p>Active IQ Unified Manager gives you deep analysis of the health of your ONTAP storage infrastructure—including capacity, performance, and data protection—along with</p>	https://www.netapp.com/blog/active-iq-unified-manager/	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A

				operational reporting capabilities.		
14.3	Capacity planning and trend analysis (optional)	NetApp ASA A50 ONTAP ONE	https://docs.netapp.com/us-en/active-iq-unified-manager/storage-mgmt/concept_introduction_to_unified_manager_health_monitoring.html	Chapter: NetApp ASA A50 ONTAP ONE	https://docs.netapp.com/us-en/active-iq-unified-manager/storage-mgmt/concept_introduction_to_unified_manager_health_monitoring.html	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
14.4	On-premises operation without mandatory internet	NetApp ASA A50 ONTAP ONE	https://docs.netapp.com/us-en/active-iq-unified-manager/install-vapp/concept_introduction_to_unified_manager.html	Active IQ Unified Manager (formerly OnCommand Unified Manager) enables you to monitor and manage the health and performance of your ONTAP storage systems from a single interface. You can deploy Unified Manager on a Linux server, on a Windows server, or as a virtual appliance on a VMware host.	https://docs.netapp.com/us-en/active-iq-unified-manager/install-vapp/concept_introduction_to_unified_manager.html	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
14.5	Complete licensing on perpetual basis included	NetApp ASA A50 ONTAP ONE	No license needed for Active IQ Unified Manager		https://docs.netapp.com/us-en/active-iq-unified-manager/storage-mgmt/concept_introduction_to_unified_manager.html	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
15. CONNECTIVITY						
15.1	Per controller: min. 1 x 1GbE for management	NetApp ASA A50 ONTAP ONE	https://docs.netapp.com/us-en/ontap-systems/asa-r2-key-specifications/asa-a50-key-	Chapter: Management ports Protocol: Ethernet 1 Gbps; Ports: 2	https://docs.netapp.com/us-en/ontap-systems/asa-r2-key-specifications/asa-a50-key-specifications.html#total-io	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A

			specifications.html#total-io			
15.2	Per controller: min. 2 x 32Gb FC (SFP+ included)	NetApp ASA A50 ONTAP ONE Software	Included, per controller: X60140A-C IO Module,4 Port FC Target+Init,32G with SFP,-C	Included, per controller: X60140A-C IO Module,4 Port FC Target+Init,32G with SFP,-C	Included, per controller: X60140A-C IO Module,4 Port FC Target+Init,32G with SFP,-C	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
15.3	Dedicated replication ports per controller min. 2 x 32G FC or equivalent	NetApp ASA A50 ONTAP ONE Software	Included, per controller: X60130A-C IO Module,2 Port,100Gb Ethernet with SFP,-C	Included, per controller: X60130A-C IO Module,2 Port,100Gb Ethernet with SFP,-C	Included, per controller: X60130A-C IO Module,2 Port,100Gb Ethernet with SFP,-C	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
15.4	Connectivity cables included	NetApp ASA A50 ONTAP ONE Software	Cable,100GbE,QSFP28-QSFP28,Cu,0.5m,-C Cable,100GbE,QSFP28-QSFP28,Cu,5m,-C Cable,LC-LC,OM4,-C All other cables needed during install and configuration of storage system will be provided by BTS PRO.	Cable,100GbE,QSFP28-QSFP28,Cu,0.5m,-C Cable,100GbE,QSFP28-QSFP28,Cu,5m,-C Cable,LC-LC,OM4,-C All other cables needed during install and configuration of storage system will be provided by BTS PRO.	Cable,100GbE,QSFP28-QSFP28,Cu,0.5m,-C Cable,100GbE,QSFP28-QSFP28,Cu,5m,-C Cable,LC-LC,OM4,-C All other cables needed during install and configuration of storage system will be provided by BTS PRO.	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
16. MINIMUM MANDATORY SUPPORTED OPERATING SYSTEMS						
16.1	Microsoft Windows Server	NetApp ASA A50	Datasheet: NetApp_ASA_A50.pdf	Page 4, Table ASA Technical specifications Host/client OS supported Windows Server, Linux, Oracle	https://www.netapp.com/media/85736-ds-4254-asa.pdf	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially

		ONTAP ONE Software Storage System		Solaris, AIX, HP-UX, VMware, macOS, ESX		<input type="checkbox"/> N/A
16.2	Red Hat Enterprise Linux	NetApp ASA A50 ONTAP ONE Software Storage System	Datasheet: NetApp_ASA_A50.pdf	Page 4, Table ASA Technical specifications Host/client OS supported Windows Server, Linux, Oracle Solaris, AIX, HP-UX, VMware, macOS, ESX	https://www.netapp.com/media/85736-ds-4254-asa.pdf	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
16.3	VMware vSphere/ESXi	NetApp ASA A50 ONTAP ONE Software Storage System	Datasheet: NetApp_ASA_A50.pdf	Page 4, Table ASA Technical specifications Host/client OS supported Windows Server, Linux, Oracle Solaris, AIX, HP-UX, VMware, macOS, ESX	https://www.netapp.com/media/85736-ds-4254-asa.pdf	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
17. POWER SUPPLY						
17.1	Minimum 2 hot-swappable redundant PSUs	NetApp ASA A50 ONTAP ONE Software	https://docs.netapp.com/us-en/ontap-systems/asa-r2-key-specifications/asa-a50-key-specifications.html#system-environment-specifications	Chapter high availability: Redundant hot-swappable power supplies	https://docs.netapp.com/us-en/ontap-systems/asa-r2-key-specifications/asa-a50-key-specifications.html#system-environment-specifications	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
17.2	1+1 or N+1 redundancy configuration	NetApp ASA A50 ONTAP ONE Software	https://docs.netapp.com/us-en/ontap-systems/asa-r2-key-specifications/asa-a50-key-specifications.html#sy	Chapter high availability: Redundant hot-swappable power supplies	https://docs.netapp.com/us-en/ontap-systems/asa-r2-key-specifications/asa-a50-key-specifications.html#system-environment-specifications	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A

			stem-environment-specifications			
17.3	IEC C13-C14 power cables, minimum 0.6m	NetApp ASA A50 ONTAP ONE Software	https://docs.netapp.com/us-en/ontap-systems/asa-r2-key-specifications/asa-a50-key-specifications.html#system-environment-specifications	Chapter high availability: Redundant hot-swappable power supplies	https://docs.netapp.com/us-en/ontap-systems/asa-r2-key-specifications/asa-a50-key-specifications.html#system-environment-specifications	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
18. CERTIFICATION & COMPLIANCE - EU STANDARDS						
18.1	CE Marking	NetApp ASA A50 ONTAP ONE	Declaration_of_Confirmity.pdf document attached to offer.	Declaration_of_Confirmity.pdf document attached to offer. Compliance on the official link.	https://docs.netapp.com/us-en/ontap-systems/asa-r2-key-specifications/asa-a50-key-specifications.html#system-environment-specifications Declaration_of_Confirmity.pdf document attached to offer.	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A
18.2	Declaration of Conformity (DoC)	NetApp ASA A50 ONTAP ONE	Declaration_of_Confirmity.pdf document attached to offer.	Declaration_of_Confirmity.pdf document attached to offer. Compliance on the official link.	https://docs.netapp.com/us-en/ontap-systems/asa-r2-key-specifications/asa-a50-key-specifications.html#system-environment-specifications Declaration_of_Confirmity.pdf document attached to offer.	<input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Partially <input type="checkbox"/> N/A



Configuratia propusa, cu indicarea Part Numbers (exemplu pentru un sistem):

Part Number	Product	Qty	Type
ASA-A50	ASA A50,Model	1	
ASA-A50-001	ASA A50 HA System	2	
ASA-A50A-100-C	ASA A50 HA System,-C	1	
X4028A-2-A-C	Drive Pack 2X15.3TB,NVMe4,SED,-C	9	Total 18 drives
SW-ONTAPO-FLASH-ASA-A50-C	SW,ONTAP One Package,Per TB,Flash,ASA-A50,-C	275	Perpetual
X60130A-C	IO Module,2PT,100GbE,-C	4	2 cards per Node
X60140A-C	IO Module,4PT,FC Target+Init,32G SFP,-C	2	1 card per node
X66211A-05-N-C	Cable,100GbE,QSFP28-QSFP28,Cu,0.5m,-C	2	
X66211B-5-N-C	Cable,100GbE,QSFP28-QSFP28,Cu,5m,-C	4	
X66250-2-N-C	Cable,LC-LC,OM4,-C	8	
X5532A-N-C	Rail,4-Post,Thin,Rnd/Sq-Hole,Sm,Adj,24-32,-C	1	
X1558A-R6-C	Jumper Crd,In-Cab,48-IN,C13-C14-C	2	
X97602A-C	Power Supply,1600W,Titanium,-C	2	
DATA-AT-REST-ENCRYPTION	Data at Rest Encryption Capable Operating Sys	2	Perpetual
CS-G1A-PARTNER-P-R	SupportEdge PartnerSelect	1	
CS-NBD-DELIVERY-INC-A-P-R	Next Business Day Parts Delivery,incl,LSC	1	
CS-NON-RETURNABLE-DRIVE-A	Non-Returnable Drives (HDDs,SSDs)	1	
SW-SMIRROR-CLD-ONTAP-ONE	Software,SnapMirror Cloud,ONTAP One	1	Perpetual

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Let us do IT for you..

Reprezentantul ofertantului:

- Numele: Bogdan Gnidaș
- Funcția: Administrator
- Data: 12.01.2026
- Semnătura: _____



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