



September 9, 2019

TO: Interested vendors

FROM: Kern Council of Governments (Kern COG)

SUBJECT: **REQUEST FOR BID - Purchase of Storage Solution**
- Due by 4 P.M. Tuesday, October 8, 2019

Kern COG, a local government joint powers agency, is seeking bids for purchase of an SAN storage array.

Requirements:

1. The storage array should support industry-leading Operating System platforms & clustering including: *Windows Server 2012, Windows Server 2016, Windows Server 2019, VMware 6.x.*
2. Offered Storage array shall be supplied with at-least dual controllers and 4 x 10Gbps.
3. Offered storage array shall be supplied with at-least 32GB cache / memory per controller for read and write operations.
4. Write DRAM cache shall be completely protected and there shall be no data loss in case of power failure
5. Offered Storage array shall provide enterprise availability of 99.999% or better and with no single point of failure
6. Offered storage array shall be supplied with 42TB or more of raw capacity.
7. Offered storage shall also be offered with additional Flash cache memory using SSD drives. Vendor shall provide additional 5.7 TB usable flash cache.
8. Usable Flash cache shall be scalable to at-least 25TB.
9. Offered Storage array shall have capability to dynamically increase or decrease the flash cache.
10. Offered Storage array shall support various capacities of SSD drives like 240GB, 480GB, 960GB, 1.9TB and 3.84TB etc. for caching and 1TB / 2TB / 4TB / 6TB and 10TB for persistent data.
11. Offered storage shall have cloud enabled monitoring and analytics engine for proactive Storage management. All required licenses for same shall be included in the offer.
12. Cloud Enabled Monitoring and analytics engine shall have capability to provide following:
 - a. Providing Firmware upgrade and patch upgrade recommendations proactively.
 - b. Providing historical capacity and performance trend analysis.
 - c. Shall be able to provide the single executive Dashboard covering various critical and must aspects of space saving from data reduction technologies, data protection readiness for classified applications running on storage, and disaster recovery readiness for applications.
 - d. Provide complete wellness chart of the array and allows the flexibility to define the wellness rule on the basis of defined conditions.

13. Cloud enabled Analytics engine shall have capability to provide following:
 - a. Shall have capability of global learning.
 - b. Analytics engine shall have capability of proactive recommendation for arresting the issues / problems noticed at other install base of vendor after identifying the problematic signature.
14. Cloud enabled monitoring and analytics engine integration with Hypervisor
 - a. Offered Cloud enabled monitoring and analytics engine shall be tightly integrated with Hypervisor layer and shall be certified to work with VMware.
 - b. Hypervisor integration shall be able to provide end to end monitoring of hypervisor Datacenter, Datastore, Hypervisor Host and VMs running within the hypervisor datacenter and shall be able to link with offered storage array.
 - c. Cloud monitoring and integration tool shall provide the detailed analysis of CPU Contention, Memory contention, IO contention for each VM – including the latency.
 - d. Cloud monitoring and integration tool shall have capability to identify the top VMs that are contributing towards maximum IOs and Latency.
15. Offered storage array shall be tightly integrated with VMware and shall be certified for VVOL.
16. Offered Storage array shall be provided and configured for at-least three simultaneous drive failure protection.
17. Offered Storage array shall be supplied with AES-256 XTS FIPS certified encryption at Granular LUN level without using self-encrypted drives.
18. Offered Storage shall support critical storage efficiency features - inline de-duplication, compression, thin provisioning at controller level.
19. Offered storage shall support both non-duplicated as well as duplicated volumes at the same time within the array.
20. Offered Storage shall support both non-compressed as well as compressed volumes at the same time within the array.
21. Offered storage shall support both inline Compression and de-duplication and shall be configured for both SSD and spinning disks.
22. Offered Storage shall support online backup for critical applications such as MS Exchange SQL, and VMware using application consistent snapshots. Any license required for same shall be supplied for entire supported capacity of the array.
23. Offered Storage shall support storage based replication between data centre for effective data protection.
24. Offered Storage array shall have separate snapshot backup policy between production and DR site.
25. Offered Storage array shall have ability to replicate only incremental changes between two sites (Primary and Secondary).
26. Offered Storage array must support multiple Snapshots or Clones or Replications sessions without any impact to performance.
27. Offered Storage array must have capability to replicate data from All Flash to Hybrid Flash or Vice Versa within the given family of arrays.



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28. Vendor shall provide the license for all critical functionalities like Snapshot, Application managed snapshots, Clone, Replication, data Tiering, QOS, LUN Configuration and Management etc. for the maximum supported capacity of array. There shall be no additional software license requirement for future capacity upgrade. Any additional license required for meeting the RFP specification shall also be offered upfront.

Bids are due by 4 P.M. Tuesday, October 8, 2019. All bids must contain a fully itemized quote demonstrating compliance with the minimum specifications. Quotes may be submitted by email or mail. For questions please contact Michael Heimer (mheimer@kerncog.org) at (661) 635-2909.