

Responses to Pre-Bid Queries

Request for Proposal for Upgrade of ODS Exadata Systems and Backup Solutions at Primary and Standby (DR) sites

Reference: LIC/CO/IT-SD/2018-19/ODS/01 dated 16th January 2019

Sr. No	RFP Document Reference(s) (Section & Page Number)	Clause (in brief) of RFP requiring clarification(s)	Brief details / Query in reference to the clause	LIC Response
1	Annexure-VIII - Section III – Point 7 Page 83	The appliance should support redundant controllers for high availability configured in active passive manner. The performance should not depend on multiple controllers working together.	Active-Active controllers configured in high availability mode offers maximum throughput and effective utilization of resources. We Request LIC : 1. To change this clause and allow active-active high availability mode configuration for superior performance and effective utilization of resources.	Refer Corrigendum-1 Sl. No. 1

2	Annexure-VIII - Section III – Point 5 Page 83 Section 2.9.0 of Page 56	Proposed appliance should support minimum backup throughput of 30 TB/hr while maintaining a single deduplication pool with RAID 6. The disks used should be of 3TB / 4TB in size. The performance should be independent of underlying disk size, capacity and number of disks. Existing DB size is 12 TB. Estimated data growth is 20% at Compound rate per year. Backup window and restoration window time should not exceed more than 3 hours for Backup from Database servers to Backup Storage Appliance and should not exceed more than 8 hours for backup from Backup Storage Appliance to Tape Library (including future growth in data in next 5 years).	As per RFP, current ODS database size is 12 TB. Backup Throughput requested as 30 TB/Hr. Per RFP Point 2.9 p) under Detailed list of work, activities and services headings, Daily Incremental and Weekly Full Backups have been requested. Considering current scenario, we would have weekly 12 TB RMAN backup size and daily 1.2 TB RMAN Incremental Backup Size. Per RFP point 2.10 f) DB to Backup Storage appliance backup window defined as 3 Hours. Considering 3 Hours backup window defined is for weekly full backups, LIC needs a backup throughput of 4 TB/HR. Backup throughput requested by LIC is 30 TB/HR which is ~7x of actual backup throughput needed. Oracle Backup Storage Appliance offers linear performance growth (Increased TB/HR) with upgrades. We Request LIC : 1. To re-look current 32TB/HR Backup Throughput Requirement and Suggest an appropriate Backup Throughput (TB/HR) 2. The Restore Throughput is AS IMPORTANT AS Backup Throughput - We Request LIC to call out Restore Throughput (TB/HR)	Refer Corrigendum-1 Sl. No. 2 & 3
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3	Annexure-VIII - Section III Point 10 Page 83	The appliance must support high density expansion shelf to enable storage capacity expansion while maintaining low data center foot print.	While High Density Storage Expansion Shelves have been requested, as per Section 3, Point 5, LIC is restricting drive size to 3-4 TB Only. High Capacity Drives offers best Price per GB ratio and always recommended for backup solution. We Request LIC : 1. To allow 10 / 14 TB SAS3 Drives to be quoted as well.	Refer Corrigendum-1 Sl. No. 2
4	Annexure-VIII - Section III Point 12 Page 83	The appliance must support creating minimum 64 virtual tape libraries 540 virtual drives, 64,000 slots & 10,00,000 virtual tapes and should have ability to backup to disk folders and manage it.	LIC backup RFP has Tape Library also listed hence need for VTL based solution might not be needed. We do not offer VTL based Disk Backup Solution. We Request LIC: 1. To remove this clause.	No Change, Please be guided by the RFP.
5	Annexure-VIII - Section III Point 18 Page 83	The appliance must be offered with battery backed up RAM / NVRAM for protection against data loss in power failure scenario and should also provide continuous automated file system check to ensure data integrity	Every vendor uniquely offers protection against abrupt power failure scenario and file system / Memory scans to ensure data integrity. We Request LIC: 1. To remove this clause.	No Change, Please be guided by the RFP.
6	Annexure-VIII - Section III Point 22 Page 84	The appliance should support 3TB & 4TB 7.2K RPM drives	While High Density Storage Expansion Shelves have been requested, as per Section 3, Point 5, LIC is restricting drive size to 3-4 TB Only. High Capacity Drives offers best Price per GB ratio and always recommended for backup solution. We Request LIC: 1. To allow 10 / 14 TB SAS3 Drives to be quoted as well.	Refer Corrigendum-1 Sl. No. 4
7	Annexure-VIII - Section III Point 23 Page 84	The appliance should support at least 1610GbE Base-T Ethernet ports.	We Request LIC : 1. The appliance should support at least 8 X 10GbE Base-T Ethernet ports. 2. Use of InfiniBand (40Gbps) Connectivity - 4 Ports to be included as an option	Refer Corrigendum-1 Sl. No. 5

8	Annexure-VIII - Section III Point 24 Page 84	The appliance should support up to 8 FC ports at 16Gbps speed	We Request LIC : 1. The appliance should support minimum 2 ports X 16 Gbps speed	No Change, Please be guided by the RFP.
9	Annexure-VIII - Section III Point 25 Page 84	The appliance should support minimum 16 10Gbe SPF+ optical	We Request LIC : 1. The appliance should support at least 8 X 10GbE SFP+ Ethernet ports. 2. Use of InfiniBand (40Gbps) Connectivity - 4 Ports to be included as an option	Refer Corrigendum-1 Sl. No. 6
10	Annexure-VIII - Section III Point 33 Page 84	Must supports communications and data transfers through both SAN & LAN. The proposed backup appliance should support min 4 x 1Gbps NIC, 16 x 10Gbps NIC and 8 x 16Gbps FC ports	We Request LIC : 1. This clause needs to be changed to - min 1 x 1Gbps NIC, 8 x 10Gbps NIC and 2 x 16Gbps FC ports. We also recommend to add 4 x InfiniBand Ports as as option	Refer Corrigendum-1 Sl. No. 7
11	Annexure-VIII - Section III Point 36 Page 84	Proposed appliance should support retention lock (WORM) feature which ensures that no stored data is deleted accidentally during its life cycle	Oracle ZFS storage doesn't support WORM feature, however, it does provide the following equivalent capabilities: File system snapshots are read-only by default. File systems can be set to read-only and also have a no-destroy flag that can be set to prevent accidental deletion. File systems include very granular access control lists (ACLs) that can be set to reduce risk of accidental deletion. We Request LIC : 1. To request to change the clause - "Proposed appliance should support retention lock (WORM) feature or equivalent feature which ensures that no stored data is deleted accidentally during its life cycle"	No Change, Please be guided by the RFP.

12	Annexure-VIII - Section III Point 41 Page 84	The appliance must have data compression and inline data de-duplication at source	Per RFP, Section 4 - Brief on Scope of Work - LIC wants to implement Configuration and implementation of Oracle advanced security transparent data encryption (TDE) in all databases for security compliance. Backup Appliance's In-line data de-duplication functionality will be inferior as TDE encrypted data can't be deduplicated. We Request LIC : 1. To remove this clause as it's only applicable for Non-TDE tablespaces	No Change, Please be guided by the RFP.
13	Annexure-VIII - Section III Point 58 Page 85	The appliance should satisfy or exceed safety regulations like IEC 60950, UL/CSA 60950, EN60950, GS, SABS, GOST, IRAM etc. with all country differences.	The following standards pertain to the countries specified in the bracket GS (Germany and EU countries), SABS (South Africa), GOST (Soviet Union), IRAM (Argentina). As the storage system will be installed in India, hence, will request removal of these standards.	Refer Corrigendum-1 Sl. No. 8
14	Annexure-VIII - Section III Point 62 Page 85	The appliance should support retention lock (WORM) feature which ensures that no data is deleted accidentally and support for point-in-time copies of a LUN or volumes with minimal performance impact	Oracle ZFS storage doesn't support WORM feature, however, it does provide the following equivalent capabilities: File system snapshots are read-only by default. File systems can be set to read-only and also have a no-destroy flag that can be set to prevent accidental deletion. File systems include very granular access control lists (ACLs) that can be set to reduce risk of accidental deletion. We Request LIC : 1. To request an change in clause - "The appliance should support retention lock (WORM) feature or equivalent technology which ensures that no data is deleted accidentally and support for point-in-time copies of a LUN or volumes with minimal performance impact"	No Change, Please be guided by the RFP.

15	Section-E: SCOPE OF WORK - 5. Training and Certification (Page 59)	Training on: Unified Switch (2 days from OEM)	Request LIC to revise this clause to "Training on: Unified Switch (2 days from OEM <i>using remote lab based webex or by bidder for classroom training</i>)"	No Change, Please be guided by the RFP.
16	B. Other / General Terms and Conditions:	12 months warranty period from date of delivery followed by 4 years AMC. If	Dell EMC backup appliance / hardware is supplied with 36 months or 60 months . Would request LIC to consider either 36months or 60months instead of 12 months warranty.	No Change, Please be guided by the RFP.
17	Section-H: Service Level Agreement (SLA)	c) The maximum response time for a maintenance complaint from the site of installation (i.e. time required for Bidder's maintenance engineers to report to the installations after a request call / fax /e-mail is made or letter is written) shall not exceed 2 hours.	c) The maximum response time for a maintenance complaint from the site of installation (i.e. time required for Bidder's maintenance engineers to report to the installations after a request call / fax /e-mail is made or letter is written) shall not exceed 4 hours.	No Change, Please be guided by the RFP.
18	Section-H: Service Level Agreement (SLA)	d) The Bidder shall ensure that faults and failures intimated by LIC as above are set right within 4 hours of being informed of the same. In case if replacement of any component required, it should be made available not later than the Next Business Day.	d) The Bidder shall ensure that faults and failures intimated by LIC as above are set right within 8 hours of being informed of the same. In case if replacement of any component required, it should be made available not later than the Next Business Day. 4 hours response time is applicable or supported only for Severity 1 cases wherein data loss or data unavailable cases only , or rest other severity cases to be resolved within 8 hours and hardware replacement within next business day.	No Change, Please be guided by the RFP.

19	Annexure-VIII Section IV – 4 Page 85	The proposed tape library must be scalable from 30 slots to 450 slots within a single tape library	The proposed tape library must be scalable from 30 slots to 272 slots within a single tape library	Refer Corrigendum-1 Sl. No. 9
20	Annexure-VIII Section IV – 6 Page 85	The proposed tape library must be able to scale up to 5.4 PB (uncompressed)	The proposed Dell EMC tape library must be able to scale up to 2.5 PB (uncompressed). Please consider scalability upto 2.5 Pb.	Refer Corrigendum-1 Sl. No. 10
21	Annexure-VIII Section IV – 12 Page 86	The proposed LTO tape drives must have a native data transfer rate of 300MB/sec or above per tape drive.	LTO8 drives have 360Mb/sec speed with Full height TL.	No Change, Please be guided by the RFP.
22	5. Training and Certification	Bidder has to arrange for Training and Certification from OEM – for all the proposed Products as a part of the RFP solution. The said trainings and certification should be delivered from OEM to 7 officials identified by LIC. The details of training are furnished herein below. All the trainings should be covered within 22 working days.	would request you to consider OEM / Bidder to provide the training to LIC officials. Need clause to be read as - " 5 days from OEM using remote lab based webex or by bidder for classroom training ". Certificate to be issued by OEM / bidder post completion of the training schedule.	No Change, Please be guided by the RFP.
23	Section B, 1.(MEC), Sl. No.3 Page 12	Bidder must have undertaken project for supply /upgradation in last 3 Financial years for the IT systems with PO Value of above 2 Crores. Bidder must have undertaken atleast one project for supply and implementation of proposed backup solution for Oracle RDBMS in India in last 3 years from the date of RFP.	Bidder / OEM must have undertaken project for supply /upgradation in last 3 Financial years for the IT systems with PO Value of above 40 lacs and above. Bidder / OEM must have undertaken atleast one project for supply and implementation of proposed backup solution for Oracle RDBMS in India in last 3 years from the date of RFP.	No Change, Please be guided by the RFP. Refer Corrigendum-1 Sl. No. 11

24	Section C-26 Point 2 Page 24	The proposed Backup and Recovery appliance must have minimum three reference customers in India where implementation has been done with Exadata integration. Reference details to be submitted with implementation details.	The proposed Backup and Recovery appliance must have minimum three reference customers in India where implementation has been done with Exadata integration by the OEM / Bidder. Reference details to be submitted with implementation details.	Refer Corrigendum-1 Sl. No. 12
25	Section C-26 Point 4 Page 25	4. The existing Backup software must have minimum three reference customers in India where implementation has been done with proposed Backup Appliance and Exadata integration. Reference details to be submitted with implementation details.	4. The existing Backup software must have minimum three reference customers in India where implementation has been done with proposed Backup Appliance and Exadata integration by the bidder / OEM Reference details to be submitted with implementation details.	Refer Corrigendum-1 Sl. No. 13
26	INDICATIVE COMMERCIAL BID (Price Summary)	Year 4 and Year 5 AMC	Please suggest % of AMC to be quoted for 4th and 5 years. As per general practice , the hardware AMC ranges between 12% to 15% Per Annum. Request LIC to confirm on the AMC % per annum.	No Change, Please be guided by the RFP.
27	1. Minimum Eligibility Criteria (MEC) [Stage I Evaluation]	The bidder should have back-to-back support with all the proposed OEM for implementation and configuration of the systems to be done by the respective OEMs.	Would request to consider OEM and / OR Bidder implementation services instead of only OEM.	No Change, Please be guided by the RFP.
28	Annexure VIII Section IV, Point 5 Page 85	The proposed tape library must be able to scale between 1 and 30 tape drives for a single tape library.	Request LIC to revise this clause to "The proposed tape library must be able to scale between 1 and 21 tape drives for a single tape library."	Refer Corrigendum-1 Sl. No. 14
29	Annexure VIII Section IV, Point 11 Page 86	The proposed tape library must have a minimum of 1 unit of 4 tape drives.	Request LIC to revise this clause to "The proposed tape library must have a minimum of 1 unit of 3 tape drives."	Refer Corrigendum-1 Sl. No. 15

30	Section E-1 Production-6 Page 52	(6) Upgrade Oracle Enterprise Linux version 6.10 in Exadata Servers and Media Servers compatible to Storage Appliance and backup software/appliance.	Oracle Enterprise Linux Version should be 6.10 or latest	Refer Corrigendum-1 Sl. No. 16
31	Section E-1 DR-6 Page 52	(6) Upgrade Oracle Enterprise Linux version 6.9 in Exadata Servers and Media Servers compatible to Storage Appliance and backup software/appliance.	Oracle Enterprise Linux Version should be 6.9 or latest	Refer Corrigendum-1 Sl. No. 17
32	Section E Point 2.1-b Page 53	b. To be deployed with Oracle Enterprise Linux 6.10 (OEL 6.10).	Oracle Enterprise Linux Version should be 6.10 or latest	Refer Corrigendum-1 Sl. No. 18
33	Section E Point 2.2-c Page 53	c) Upgrade OS version to OEL 6.9 on DB Servers and Cell Storage Servers.	OS Version should be OEL 6.9 or latest	Refer Corrigendum-1 Sl. No. 19
34	Section E Point 2.12-8-c Page 58	Upgrade OS (i.e. OEL) to OEL 6.9 / 6.10 as required.	OS version should be OEL 6.9 / 6.10 or latest	Refer Corrigendum-1 Sl. No. 20
35	10. DETAILS OF DELIVERABLES, Pg#61	Advanced Security Licenses 44 nos	Advanced Security Licenses should be 45 (36+54=90) *0.5=45 Licenses	No Change, Please be guided by the RFP.
36	Annexure VIII Section I, Point 8 Page 81	The Proposed Exadata Machine should have an option to configure as a bare metal or Virtualize.	Do all the Exadata Machines be configured with Exadata Virtualization or Bare Metal , i.e Exadata X7-2 (Prod),Exadata X5-2 (DR) , Exadata X5-2 (UAT/SMS) .Please Clarify.	Refer Corrigendum-1 Sl. No. 21
37	Annexure VIII Section V Page 87	NA	Kindly confirm the total number ports and type of ports (1G/10G/FC/25G, etc) per unified switch	Refer Corrigendum-1 Sl. No. 22
38	Page 12 4. Brief on the Scope of Work:	(7) Configuration and implementation of Oracle advanced security transparent data encryption (TDE) in all databases for security compliance.	Please provide Number of DB Tables	Will be decided at the time of implementation.

39	Page 15 4. Brief on the Scope of Work:	(1) Supply, installation and commissioning of the New Exadata X7-2 (Quarter Rack) in Production Site.	Initial Data migration will be done by the bidder. Please confirm.	Refer the RFP conditions 2.12.3 of Section E
40	Section E Page 52	Scope of work	As per our understanding the current OS is OEL 6.10 and please provide the proposed OS version	Refer the response given under point Sl. No. 30 above
41	Section E Page 52	Scope of work	Please provide the number of RAC nodes to be configured for DC, DR & UAT and also please provide the version the RAC to be implemented	Refer RFP condition 2.12.6.c under Section E
42	Section E Page 52	Scope of work	Whether ASM to be enabled or not	Refer RFP
43	Section E Page 52	Scope of work	Please provide the mode of data transfer to DC from DR (RMAN/Cold Backup) after installation of DC	Refer Scope of Work given in the RFP
44	General		Please provide the cloning frequency of your database	Query not related to RFP
45	General		How many number of users will be accessing the system?	Query not related to RFP
46	General		Please provide your backup strategy.	RMAN backup through existing NetVault backup Software
47	B. Other / General Terms and Conditions: Page 30	1. Contract period The contract tenure will be for 66 months, from the date of signing the contract unless otherwise mutually agreed upon between LIC and the selected Bidder, broken down as follows: a) 14 weeks implementation b) 12 months warranty period from date of delivery followed by 4 years AMC.	Please confirm that the 14 weeks implementation starts after the delivery of the Exadata system by Oracle?	Refer RFP

48	1. Minimum Eligibility Criteria (MEC) [Stage I Evaluation] Page 12	Bidder must have undertaken project for supply /upgradation in last 3 Financial years for the IT systems with PO Value of above 2 Crores. Bidder must have undertaken atleast one project for supply and implementation of proposed backup solution for Oracle RDBMS in India in last 3 years from the date of RFP.	Sify being a DC Service provider we have many other solution that is being used for our cusotmer to t ake the Oracle RDBMS backup. Kindly consider this as alternative to netvault back up solution for reference purpose. Having said this we will deploy best of the Netvault resource to deploy your given solution. This resource will have 7+ years of experience and probability of certification also	No Change, Please be guided by the RFP.
49	3. Eligibility Criteria	Bidder must have undertaken atleast one project for supply and implementation of proposed backup solution for Oracle RDBMS in India in last 3 years from the date of RFP.	Bidder /OEM must have undertaken atleast one project for supply and implementation of proposed backup solution for Oracle RDBMS in India in last 3 years from the date of RFP.	Refer Corrigendum-1 Sl. No. 11
50	3. Eligibility Criteria	Bidder /OEM must have undertaken atleast one project for supply and implementation of proposed backup solution for Oracle RDBMS in India in last 3 years from the date of RFP.	Bidder must have undertaken atleast one project for supply and implementation of backup solution for Oracle RDBMS in India in last 3 years from the date of RFP.	No such wordings in the RFP under Eligibility Criteria with Sl.No.3
51	Page No. 53 Section Section-E: SCOPE OF WORK	The scope of work includes Supply, installation, testing, commissioning and maintenance of Oracle Exadata hardware, Backup Storage appliance and Backup Tape library along with upgrade of database version, operating system as per technical specifications provided in Annexure-VIII and Bill of Material provided in this document. Location details for supply of the material are Production Site (DC, Vile Parle) and DR Site (IDC, Prabhadevi).	What is the backup process in DC & DR, ?	Refer RFP
52			What are the challenges facing in the current setup?	No comments
53			Whether backup server hardware need to b provide and which locations?	Refer RFP
54			Whether the tape library need at both locations (DC & DR) ?	Refer RFP
55			What is the expected backup and restoration schedules / frequency at DC & DR?	Refer RFP
56			Where is the Net vault agent is installed? On medial server or Exadata ?	Refer RFP

57			Where is the FRA (Flash recovery Area) located ?	Exadata Systems
58			Do we need to be OEM with existing NETVAULT backup application ?	Query not clear
59			In existing Exadata environment what is the Oracle Linux version installed?. Whether it is same for all the OEL deployed in the Exadata environment ?	Refer RFP
60			Whether tape library need at both the locations?	Refer scope of work given in RFP
61			Since new Exadata require restoration from old Exadata system, whether existing support team would help to the bidder in restoration of Old database to new version of Exadata?. What would be the role and responsibilities of existing support vendor ?	Refer RFP
62			Since it is not been clarified the compatibility by any OEM with existing backup software i.e. Netvault and if there is any compatibility issue, can Intech proposed any other backup software / solution which would be compatible with new version of Exadata and propose backup system (library and appliance)	In case of compatibility issues with Netvault Backup Software, please provide us details.

Chief (IT/SD)