



City of Santa Fe, New Mexico

Addendum No. 1 – May 19, 2016

Request for Proposal 16/39 - Data Center Hardware, Associated Equipment and Services

Date of Advertisement: May 2, 2016

Due Date and Time: March 4, 2016, 2:00 PM Mountain Time

City of Santa Fe Purchasing Office
Attn: Robert Rodarte
Building "H"
2651 Siringo Road
Santa Fe, New Mexico, 87505

The following clarifications, amendments, additions, revisions, changes and modifications change the original Request for Proposals only in the amount and to the extent hereinafter specified in this Addendum.

Each Proposer shall acknowledge receipt of this Addendum in its proposal response.

1. Question: What are the required network connections for the physical servers that are being moved to the new data center and to the DR site?

City Response: 10GB backbone is preferable but we will probably only need 1GB backbone at DR site.

2. Question: We are not including racks in our proposal, however should we include Power Distribution Units in our design, or will that be assumed to be provided by the Primary and DR data center facilities?

City Response: The City is not asking for any Rack support hardware in this RFP.



3. Question: Due to RPO/RTO requirements for applications not listed in attachment 3 - Please let us know when DR and DC RFP's will be released in order to design configurations appropriately. We feel this is important to the overall solution and planning and would like to see them prior to the due date of 6/2/16?

City Response: There is no exact date for the release of the Data Center Co-location RFPs. Attachment 3 outlines the need for our Exchange Servers, Avaya servers and File servers to all have fail over to the DR site. These are listed in the first two attachments specifically. There will be a 1GB network connection between these facilities.

4. Question: Will the award generate multiple awardees, or a single award?

City Response: This RFP will be awarded to one vendor with the best solution presented. Other RFPs will be decided on the merit of those responses.

5. Question: Has a baseline budget been established for each of these RFP's?

City Response: Yes. The budget is under review by the City Leadership and will be finalized in early Fiscal year 2017. The City has full confidence in the ITT department so we don't anticipate any issues with it being approved.

6. Question: Would you share the full DPACK report?

City Response: Due to security concerns we cannot publish the Dpack report. All pertinent information from the Dpack report is listed in the first two attachments which list the Servers that we plan on virtualizing and those that we do not.

7. Question: What is the IO characterization for the 4 Database instances?

- Per Database size?
- IO profile per database workload?
- Latency per database workload?

City Response: Not Collected by the DPACK for all 4 questions

IOPS are calculated per Dell's DPACK v2.0 standard. The IOPS numbers from the Addendum Spreadsheets were collected with DPACK over a 7 day period. The IOPS details shown below are based on the 95th percentile IOPS for the individual server. Of the 4 Database servers on the addendums, only 2 are critical, server numbers 25 and 40 from addendum #1, additional DPACK details are as follows:

Server 25 (Full Court Oracle Server):

Individual Server Report: ██████████			
Operating System		Microsoft Windows Server 2008 R2 Enterprise Service Pack 1	
Time Recorded		7 Day(s), 0 Hour(s), 0 Minute(s), 1/11/2016 - 1/18/2016	
Output Summary		Output Summary	
Disk Throughput	18.40 MB/s	Average IO size	Read: 86.47 KB / Write: 37.29 KB
IOPS	53 at 95%	Average Latency	2 ms Reads and 7 ms writes
Read/Write Ratio	92% / 8%	Average Queue Depth	2.01
Total Local Capacity	5.59 TB	Peak/Min CPU	75% / 0%
Free Local Capacity	2.77 TB (50%)	Peak/Min Memory	31.91 GB / 28.68 GB
Used Local Capacity	2.82 TB (50%)	Peak/Min Memory In Use	4.83 GB / 1.61 GB
Sockets	Cores	Description	
2	12	Intel(R) Xeon(R) CPU E5-2640 0 @ 2.50GHz	

Server 40 (Finance SQL Server):

Individual Server Report: ██████████			
Operating System		Microsoft Windows Server 2008 R2 Enterprise Service Pack 1	
Time Recorded		7 Day(s), 0 Hour(s), 0 Minute(s), 1/11/2016 - 1/18/2016	
Output Summary		Output Summary	
Disk Throughput	288.20 MB/s	Average IO size	Read: 46.34 KB / Write: 52.79 KB
IOPS	19 at 95%	Average Latency	4 ms Reads and 2 ms writes
Read/Write Ratio	96% / 4%	Average Queue Depth	0.83
Total Local Capacity	5.46 TB	Peak/Min CPU	43% / 0%
Free Local Capacity	5.15 TB (94%)	Peak/Min Memory	22.80 GB / 1.28 GB
Used Local Capacity	317.00 GB (6%)	Peak/Min Memory In Use	23.72 GB / 2.20 GB
Sockets	Cores	Description	
2	12	Intel(R) Xeon(R) CPU E5-2430 0 @ 2.20GHz	

8. Question What is the timeline for Office365 migration from local Exchange application?

City Response: Not established at this point. 24 months at the earliest.

9. Question: What is the City's budget for this project?

City Response: The budget is under review by the City Leadership and will be finalized in early Fiscal year 2017. The City has full confidence in ITT department so we don't anticipate any issues with it being approved.

10. Question: Would the City like to procure this via an Operational Expense or a Capital Expense?

City Response: Capital Expense at this time.

11. Question: If an operational expense what Term would the City like, 1 year, 2 year, 3 year

City Response: As was mentioned in the meeting and in the RFP we are seeking leasing options.

12. Question: At the end of the initial term would the City like a purchase option for the equipment?

City Response: Desirable.

13. Question: Would the City consider a host infrastructure that could potentially consist of private and public cloud (IaaS) as well as Platform as a Services (PaaS) assuming the environment met all compliance and security directives? Question is relevant to both primary and DR sites

City Response: The City is not interested in a Cloud solution for the Primary Data Center but will entertain a Cloud option for the DR Data Center.

14. Question: Is the City specifically looking to deploy hyper converged infrastructure, or is any server/storage combination that fits their goals for virtualization, growth, flexibility, and cost under consideration?

City Response: The City preference is a Hyper Converged Architecture. Other options might be considered if adequately presented to meet our strategic goals and are scalable as a long term solution.

15. Question: CenturyLink would like to formally request a 2 week extension?

City Response: No extensions to the response deadline.

16. Question: How does the customer define IOP – size, r/w mix, response time?

City Response: Per Dell DPACK 2.0 standard.

17. Question: Is the IOP listed an average or a peak IOP?

City Response: See previous IOPS notes.

18. Question: What is the active data set as a percentage of storage?

City Response: Total and used disk capacities are listed in the addendums, percentage varies between Primary and DR sites.

19. Question: What is the CPU utilization of the servers being virtualized?

City Response: Undisclosed.

20. Question: Should we configure for SFP+ based 10G NICs or copper?

City Response: Best price/performance ratio

21. Question: What bandwidth is available between the 2 sites?

City Response: 1 GB between Primary Data Center and DR Data Center.

22. Question: Do you want the configuration to be hardware only or include VMware licensing?

City Response: Provide pricing for a complete package with all related software licensing included (VM applications, Hypervisor, Switches, Firewalls, etc.)

Proposers are instructed to return a copy of this addenda form signed by an authorized firm agent as part of proposal responses.

SIGNATURE

COMPANY

DATE