Questions & Answers - 1

Solicitation   21-680-014 - Hyperconverged Server Infrastructure
Buying Organization   Poudre School District

No	Question/Answer	Question Date
Q1	**Question: VMWare requirements** Is the district open to an alternative to VMWare if we can satisfy all other requirements of the Hyperconverged Solution and save them money with the licensing fees? **Answer:** The District is tightly integrated with VMWare usage and is not considering alternatives at this time.	04/29/2021
Q2	**Question: 21-680-014 Questions** 1. How many compute nodes do you estimate are you looking for? 2. What sizing tool (live optics or other) was used to determine requirements? Can we get a copy of that data? 3. Can we get a list of all equipment to be traded in? 5. What network switch devices exists at top of rack? Current capabilities? 6. Level of support required? 3 or 5YR? 24x7 response time with next business day or same day fix on fail? 7. How many school sites will utilize the HCI solution? All or some? 8. Is there a specific HCI solution you are looking for already or are you open to all manufacturers? 9. Is all VMware licensing already in place? Are you planning to re-use existing licensing on the HCI Solution? 10. Network adapter requirements not specified, what are your requirements? 10GbE, 25GbE, 40GbE or other? 11. In terms of deployment, what level of training and implementation are you requiring? Rack and Stack, Deployment, All VM moves from existing infrastructure completed? All Training on-site or can it be a hybrid of on-site and virtual? 12. What is your current backup and DR solution in place? 13. Are you looking for ongoing managed services to assist your team? If so, for what duration? Service term matching the warranty support? 14. Where is your current infrastructure located? Is the HCI solution being installed at that same datacenter? 15. What power and backup power capabilities do you have at your current datacenter? **Answer:** (These questions have been submitted and answered individually below.)	05/02/2021

No	Question/Answer	Question Date
Q3	**Question: Section 4.1** Section 4.1 indicates that the District believes a hyperconverged solution will provide a lower total cost of ownership, and improved availability and performance. Can you help us understand any previous internal efforts that led to these conclusions? **Answer:** Based on third party recommendations, including Gartner, the District discovered that an HCI solution would lower TCO and improve performance compared to its current infrastructure.	05/03/2021
Q4	**Question: Non-hyperconverged Solution** Will the District consider a non-hyperconverged solution? **Answer:** Not at this time	05/03/2021
Q5	**Question: OpEx Usage Based Model** Will the District consider a proposal that utilizes an OpEx, usage based model for the requested compute, network, storage infrastructure and on-going services? **Answer:** No, the District is only considering a Capex model of purchase and own.	05/03/2021
Q6	**Question: Section 4.4.4** Section 4.4.4 notes briefly there is a requirement that a successful offeror "must install and configure a disaster recovery solution." Does the District have a DR/BCP plan currently? **Answer:** The District currently has a basic DR/BCP plan. In addition to standard backups, the District also has an offsite colocation for replicating data.	05/03/2021
Q7	**Question: Section 4.4.4** Does the proposed solution need to integrate with the existing DR/BCP plan and tools? **Answer:** It is not a requirement to integrate with the current plan but could be considered.	05/03/2021
Q8	**Question: Section 4.4.4** What technology tools is the District is using today to deliver disaster recovery capabilities? **Answer:** The District currently uses CommVault and VMWare for DR capabilities.	05/03/2021
Q9	**Question: Section 4.4.4** Does the District have any specific requirements around recovery point objectives and recovery time objectives for a disaster recovery solution? **Answer:** Not at this time	05/03/2021
Q10	**Question: Section 4.4.4** Does the District have any specific requirements around the geographic location of a disaster recovery solution? **Answer:** Not at this time	05/03/2021
Q11	**Question: Section 4.4.4** Does the District want or require a successful offeror to provide on-going management of the disaster recovery solution? **Answer:** The District does not require management but is open to reviewing that if it is included with the solution.	05/03/2021

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Q12	**Question: Section 4.4.4** Does the District want or require a successful offeror to conduct disaster recovery tests on a regular basis? **Answer:** The District would be open to reviewing the possibility of DR tests on a regular basis, if included with the solution.	05/03/2021
Q13	**Question: Section 4.4.4** Are all 140 VMs and 160TB of storage in scope for the disaster recovery solution? **Answer:** No, the District estimates about half of that would be in scope for DR.	05/03/2021
Q14	**Question: Section 4.5.1** Section 4.5.1 outlines specific compute, storage, and memory requirements – are these requirements before or after any consideration for N+1 redundancy? **Answer:** These are before consideration for N+1.	05/03/2021
Q15	**Question: Technical Requirements Regarding Storage** Does the District have any technical requirements around the characteristics of the storage required by the new solution? For instance, do you have any specific IOPs requirements, what is the mix of read/write IOPs, average IOPs size, etc.? **Answer:** The District does not have any technical requirements other than it should NOT include any spinning disk storage technology.	05/03/2021
Q16	**Question: Nodes Required** How many compute nodes do you estimate are you looking for? **Answer:** The District needs the minimum compute nodes required to meet the RFP specifications, but enough to withstand the loss of at least one node without experiencing any service interruption.	05/03/2021
Q17	**Question: What sizing tool was used?** What sizing tool (live optics or other) was used to determine requirements? Can we get a copy of that data? **Answer:** Live optics was used to generate the technical requirements listed in the RFP.	05/03/2021
Q18	**Question: Existing Network Infrastructure** What network switch devices exists at top of rack? Current capabilities? **Answer:** HP switches with 48 ports ethernet, 4 ports 1/10GB fiber	05/03/2021
Q19	**Question: Level of support required?** Level of support required? 3 or 5YR? 24x7 response time with next business day or same day fix on fail? **Answer:** 5-year, 24x7, next day support required	05/03/2021
Q20	**Question: How many school sites?** How many school sites will utilize the HCI solution? All or some? **Answer:** The District will host the HCI solution in its primary data center and those resources will be accessed by all District sites through the District's WAN	05/03/2021

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Q21	**Question: Non-VMWare Hypervisor Solution** Is the District only considering solutions based on VMWare's hypervisor technology? **Answer:** Yes, the District is only considering a solution based on VMWare.	05/03/2021
Q22	**Question: Results of Previous HCI Solution Evaluations** Has the district evaluated any previous HCI solutions? What were the results of those evaluations? **Answer:** The District has done extensive research on HCI solutions and the related technologies but has not evaluated any specific customized solutions at this point.	05/03/2021
Q23	**Question: Specific HCI solution** Is there a specific HCI solution you are looking for already or are you open to all manufacturers if the solution meets all requirements? **Answer:** The District is willing to analyze and consider any manufacturer that meet its requirements	05/03/2021
Q24	**Question: VMware licensing** Is all VMware licensing already in place? Are you planning to re-use existing licensing on the HCI Solution? **Answer:** The District already has VMware licensing in place and will re-use it.	05/03/2021
Q25	**Question: Network adapter requirements** Network adapter requirements not specified, what are your requirements? 10GbE, 25GbE, 40GbE or other? **Answer:** Minimum of 10GbE required	05/03/2021
Q26	**Question: Deployment** In terms of deployment, what level of training and implementation are you requiring? Rack and Stack, Deployment, All VM moves from existing infrastructure. **Answer:** The District requires the awarded vendor to install, configure, and deploy the new infrastructure, and migrate the District's Virtual Machines to the new system. For training, the District expects the awarded vendor to provide onsite training for the week it is onsite for installation.	05/03/2021
Q27	**Question: Managed services** Are you looking for ongoing managed services to assist your team? If so, for what duration? Service term matching the equipment hardware warranty & support? **Answer:** The District requires onsite installation, configuration, and training during the initial phase of the project with ongoing 24x7 support for 5 years.	05/03/2021
Q28	**Question: Current infrastructure** Where is your current infrastructure located? Is the HCI solution being installed at that same datacenter? **Answer:** The solution will be installed in the District's primary datacenter.	05/03/2021

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Q29	**Question: Networking Switching** Section 4.0, Item 4.4, Sub 4.4.1 - (Page 13) Question: Is new networking switching required/expected as part of this RFP or will we integrate with existing switching? **Answer:** The District would prefer separate networking for inter-node connectivity but can connect to current network switching for core network access.	05/03/2021
Q30	**Question: Networking Switching** Section 4.0, Item 4.4, Sub 4.4.1 Question: If we are integrating with existing switching, what model and quantity are they? **Answer:** Not integrating; requesting new, separate networking for inter-node communications	05/03/2021
Q31	**Question: VMWare Platform** Section 4.0, Item 4.4, Sub 4.4.2 - (Page 13) Question: What is the current version of VMware? **Answer:** 6.7, but would like the solution to support 7 and higher	05/03/2021
Q32	**Question: VMWare Platform** Section 4.0, Item 4.4, Sub 4.4.2 - (Page 13) Question: What level of licensing do you currently own? **Answer:** Enterprise Plus	05/03/2021
Q33	**Question: VMware Platform** Section 4.0, Item 4.4, Sub 4.4.2 - (Page 13) Question: Are you interested in re-purposing your current VMware licensing? **Answer:** Yes, the District will be reusing its VMWare licensing.	05/03/2021
Q34	**Question: Disaster Recovery** Section 4.0, Item 4.4, Sub 4.4.4 - (Page 13) Question: What is your current DR Strategy? **Answer:** Data and VMs are copied offsite and available for restore.	05/03/2021
Q35	**Question: Disaster Recovery** Section 4.0, Item 4.4, Sub 4.4.4 - (Page 13) Question: Will this disaster recovery solution be at another location? **Answer:** Yes, it will.	05/03/2021

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Q36	**Question: Disaster Recovery** Section 4.0, Item 4.4, Sub 4.4.4 - (Page 13) Question: What is the distance from the primary datacenter to the DR location? **Answer:** Five miles currently and connected via 10GbE Fiber	05/03/2021
Q37	**Question: Disaster Recovery** Section 4.0, Item 4.4, Sub 4.4.4 - (Page 13) Question: What is the network speed and latency between the primary datacenter and the DR location? **Answer:** 10GbE Fiber and 5ms or less	05/03/2021
Q38	**Question: Disaster Recovery** Section 4.0, Item 4.4, Sub 4.4.4 - (Page 13) Question: What are the technical requirements for the DR solution? **Answer:** The DR solution should be enough to duplicate one half of the production HCI environment, if necessary.	05/03/2021
Q39	**Question: Disaster Recovery** Section 4.0, Item 4.4, Sub 4.4.4 - (Page 13) Question: Will this DR solution provide only storage backups? **Answer:** No, it should also be able to handle Virtual Machines as well.	05/03/2021
Q40	**Question: Disaster Recovery** Section 4.0, Item 4.4, Sub 4.4.4 - (Page 13) Question: Will any partial compute/memory resources be necessary to run a set number of workloads, or will the DR solution need to be sized 1:1 of the primary HCI solution? **Answer:** The DR solution should be sized to handle one half of the primary HCI solution with capability to scale in the future, if necessary.	05/03/2021
Q41	**Question: Disaster Recovery** Section 4.0, Item 4.4, Sub 4.4.4 - (Page 13) Question: What are the backup policy requirements as it pertains to retention? **Answer:** Retention should be a minimum of three (3) months for VMs.	05/03/2021
Q42	**Question: Disaster Recovery** Section 4.0, Item 4.4, Sub 4.4.4 - (Page 13) Question: How many hourly/daily/weekly/monthly/yearly backups will you need to take and for how long will each of those need to be retained? **Answer:** One weekly backup will need to be retained for up to three months.	05/03/2021

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Q43	**Question: Disaster Recovery** Section 4.0, Item 4.4, Sub 4.4.4 - (Page 13) Question: Is there a specific percentage of change rate we need to account for these policies? **Answer:** There is not.	05/03/2021
Q44	**Question: Maintenance and Support** Section 4.0, Item 4.4.5, Sub 4.4.5.1 Question: Do you require Defective Media Retention as part of the support, where by if a drive fails, instead of returning the drive to manufacturer, you keep the defective drive instead of returning it to the OEM? **Answer:** The District does not require "Keep your drive" support.	05/03/2021
Q45	**Question: Training Requirements** Section 4.0, Item 4.4, Sub 4.4.6 - (Page 13) Question: Please provide specific details regarding onsite training requirements? **Answer:** Training can be virtual, on-site, or a mix of both. Training should be structured for technical staff as if the District were to handle the support itself, as far as possible, before calling Support.	05/03/2021
Q46	**Question: Training Requirements** Section 4.0, Item 4.4, Sub 4.4.6 - (Page 13) Question: Is vendor in-person training an acceptable substitution for onsite training, or must the training be on-premises? **Answer:** Training can be virtual, on-site, or a mix of both.	05/03/2021
Q47	**Question: HCI Minimum Requirements** Section 4.0, Item 4.5, Sub 4.5.1 - (Page 14) Question: Has there been any assessments done through an RVTools/LiveOptics/Etc. report that would provide more background data on the current infrastructure to be migrated to HCI? **Answer:** Assessment has been completed through LiveOptics.	05/03/2021
Q48	**Question: HCI Minimum Requirements** Section 4.0, Item 4.5, Sub 4.5.1 - (Page 14) Question: How many vCPU's are being used in the environment? **Answer:** 216 vCPUs are being used	05/03/2021
Q49	**Question: HCI Minimum Requirements** Section 4.0, Item 4.5, Sub 4.5.1 - (Page 14) Question: What is the size, in GB, of the largest VMs in the environment? **Answer:** 1.45 TB is the largest VM	05/03/2021

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Q50	**Question: HCI Minimum Requirements** Section 4.0, Item 4.5, Sub 4.5.1 - (Page 14) Question: How many IOPS does the environment require? **Answer:** The District requires the storage in the solution to be non-spinning disk and IOPS of 10550.	05/03/2021
Q51	**Question: Turnkey Solution** Section 4.0, Item 4.5, Sub 4.5.2 - (Page 14) Question: Please expand on what is meant by "turnkey"? **Answer:** The solution provided will be installed and configured by the manufacturer to the point where the District will be able to seamlessly cutover to the new infrastructure with little to no District involvement. The infrastructure will be configured to a point where the District's only requirement would be to move its virtual machines over to the new infrastructure	05/03/2021
Q52	**Question: Turnkey Solution** Section 4.0, Item 4.5, Sub 4.5.8 - (Page 14) Question: Do we need to factor in a certain % of growth of vCPU/Mem/Storage? **Answer:** A growth of 20% should be considered for future capacity.	05/03/2021
Q53	**Question: Knowledge Transfer** Section 4.0, Item 4.6, Sub 4.6.4 - (Page 15) Question: Is this knowledge transfer request different than the training sessions for five (5) people requested in bullet 4.4.6? **Answer:** The training sessions should be based on break-fix; the knowledge transfer should be based on the setup of the new environment.	05/03/2021