
Request for Proposal

The Stockbridge-Munsee Community

Request for Proposal

Information Technology – Data Center Upgrade 2019

2/08/2019

1 STATEMENT OF WORK

1.1 PURPOSE

The purpose of this Request for Proposal (RFP) is to invite prospective consultants to submit a proposal to perform data center upgrades for Stockbridge-Munsee Community.

Proposed solution should be based on a five-year expected life cycle.

Server and Storage – Propose a solution with related components and services according to the design parameters stated in this RFP.

Network – Proposal to be based on established solution – provide components as listed and services according to parameters stated.

1.2 SCOPE OF WORK – Server and Storage

For server and storage, upon selection, the selectee will deploy two (2) datacenter solutions in two different locations: The North Star Mohican Casino (Casino) and the Tribal Health and Wellness Center (Health Center).

A. Provide Casino hardware that meets the following requirements:

- a. Four (4) Enterprise grade servers, with the following specifications
 - i. At least two CPUs, minimum 16 physical cores per CPU
 - ii. At least 384 GB of memory
 - iii. VMware vSphere licensing (Enterprise Plus) to cover two (2) sockets of CPU
 - iv. Remote management capability (IPMI)
 - v. Dual Power Supplies
 - vi. 10 GbE SFP+ ethernet iSCSI connectivity as Direct-Attach Cables (DAC), at least 7 meters long
- b. Additional HPE memory for the existing three hosts, in the quantity of 128 GB per host (total of 24 x 16 GB memory chips)
- c. A new SAN for production, or an expansion to the existing environment for a total of a minimum of 60 TB of effective storage. The existing Nimble SAN has approximately 30 TB of effective storage.
 - i. Must have 10 Gb iSCSI connections if additional connections are required
 - ii. Must be from a vendor and technology that has existed for at least five (5) years
- d. A new SAN for DR. This SAN must support SAN level replication with the production side and must contain at least 60 TB of effective storage

- i. Must have 10 Gb iSCSI and include DAC, at least 7 meters long
 - ii. Must support SAN level replication for low RTO and RPO with production storage
 - B. For the Casino side, provide a services implementation cost associated with installation of SAN hardware. Casino personnel will perform all work with the servers; only SAN upgrades and deployment should be provided as part of quote for services.
 - a. Implementation of new storage
 - b. Validation
 - c. Verify connectivity with hosts (Casino personnel will implement the hosts including VMware installation and configuration)
 - C. Provide the Health Center with hardware that meets the following requirements:
 - a. At least three (3) (maximum 4) Enterprise grade servers with the following specifications
 - i. At least 1.1 TB of N+1 memory for redundancy and growth. The total amount of memory is dependent upon the number of servers
 - ii. Two (2) processors with at least 16 physical cores in each CPU.
 - iii. VMware vSphere licensing for every physical CPU (Standard)
 - iv. VMware vCenter Standard licensing for cluster management
 - v. Remote management capability (IPMI)
 - vi. Redundant power
 - vii. 10GBASE-T connectivity, as Cat 6a copper ethernet
 - viii. If the proposal selected is a Hyperconverged (HCI) solution for storage, the above requirements are in addition to the overhead required by the HCI solution.
 - b. A storage solution that meets the listed requirements below. Please note, this can be an HCI solution or legacy 3-tier (SAN) solution. However, if HCI, proposed solution MUST be from a reputable, well supported vendor (Nutanix/VXrail/HPE SimpliVity) that has existed for at least five (5) years. Only major, enterprise vendors will be considered.
 - i. At least 30 TB of effective storage
 - ii. 10GBASE-T connectivity as Cat 6a copper ethernet
 - c. If the proposed solution would require more than 4U of rack space, include a server rack that is compatible with the proposed solution.
 - D. For the Health Center, provide a services implementation and migration cost associated with the hardware that also covers the scope of work as follows.
 - a. Implementation (rack and cable, initialization, software/firmware upgrades) of new storage and hosts
 - b. Installation and configuration of vSphere on hosts
 - c. Installation and configuration of new vCenter

- d. Migration of existing VMware workloads from Admin Office (AO) and Health Center (HC) VMware cluster. See 2.1 below for additional information. Please note that the AO VMs must have new IPs assigned, or the AO VLAN must be migrated to the HC datacenter. If the latter, a new IP subnet must be created for the AO and implemented (printers/DHCP/etc.)
- e. Convert existing Hyper-V VMs to the new VMware solution. See 2.1 for the number of VMs and quantity of storage.
- f. Deploy a net new RDS farm on the new hosts
 - i. Server 2012 R2 (licensing already exists)
 - ii. Must support 50 concurrent users
 - iii. Must migrate existing applications from the current RDS server to the new farm and/or hosts.
 - 1. Great Plains for accounting
 - 2. Intergy for HR-related services
 - iv. The above applications are not portable in their current state (see 2.1), so they must be migrated. The Tribal side has active support contracts for both, so use of that support as part of the migration is valid. Additionally, working with an additional partner for application migration is allowed. The cost for this migration MUST be included in any proposal.

1.3 SCOPE OF WORK – Network

For network and physical requirements, upon selection, the selectee will:

A. Casino

- 1. Provide, install, and configure turn-key operation for network components to provide additional network ports for new servers to existing saturated server stack at 10Gbe.
 - a. Supply new pair of HPE 5900AF 48XG 4QSFP+ Switches according to bill of materials shown in Figure 1
 - b. Supply DAC cabling to integrate new 5900 pair to existing stack and new servers according to bill of materials shown in Figure 1 (note that cabling for servers is not included here)
 - c. Troubleshoot/correct whatever is wrong with the 7904 MDF and IDF3 pairs which caused the secondary 7904s to be abandoned (for best redundancy); or ratify their abandonment by ensuring the architecture is reflective of same and fully decommission secondaries.
 - d. Configure IRF on new pair of HPE 5900AF 48XG 4QSFP+ Switches to data center racks, integrate to existing 5900 IRF stack.
 - e. Integrate new switches with existing 7904 core switch stack as architecture resiliency warrants.

- f. Configure ports at 5900 stack in MDF and IDF3 to support new server and storage equipment requirements.
2. Note that existing rack space, appropriate power, UPS, and PDU are in place for 120VAC operation

Figure 1 – Network Bill of Materials

Part Number	Description	Quantity
JC772A	HPE 5900AF 48XG 4QSFP+ Switch	2
U3GC2E	HPE 3Y FC 24x7 5900-48 Switch SVC [for JC772A]	2
JC680A	HPE 58x0AF 650W AC Power Supply	4
JC680A ABA	INCLUDED: Power Cord - U.S. localization	4
JC683A	HPE 58x0AF Frt(prt) Bck(pwr) Fan Tray	4
JG328A	HPE X240 40G QSFP+ QSFP+ 5m DAC Cable	4

B. Health Center

1. If solution will require more than 4RU of space, add additional 42RU rack/cabinet (1) to match existing, with the following guidelines:
 - a. Place to the right of existing cabinet
 - b. Add and configure additional PDUs (2) to match existing Liebert MPH 208V in/out smart PDUs in current rack
 - c. Properly ground rack
 - d. Add cable tray to extend over both server racks for patch cable routing

(Alternatively, leverage existing 4U at top of server rack.)

2. If solution will require more than 3000VA of load, add an additional Liebert 6000 kVA UPS
 - a. Note point-in-time 10/2018 loading of existing qty 2 GXT3-6000RT208
 - i. Network rack: L1=50-75% and L2=0-25%
 - ii. Server rack: L1=0-25% and L2=0-25%
 - b. Redistribute all loads properly across UPS output legs and PDUs for redundancy balancing.

(Alternatively, leverage existing Qty. 2 Liebert UPS systems, and redistribute all PDUs and loads properly across UPS output legs and PDUs for redundancy balancing.)

3. Supply and route network Cat 6a ethernet patch cables (white) to patch new servers to existing switches with more the 16 10GBASE-T ports currently available

- a. 20' or as required
- 4. Configure existing switch ports according to need for servers

1.4 COMPENSATION

Total cost of the project shall be broken down by each Scope of Work area as follows:

- 1.2 A-B Casino – Server Storage
- 1.2 C-D Casino – Network
- 1.3 A Health Center – Server Storage
- 1.3 B Health Center – Network

All projected costs including travel must be presented with your proposal. Lodging and meals will be provided by North Star Mohican Casino Resort at no cost to consultants. Pricing is based on a dining credit of \$45.00 per day, per person while on property during the consultants stay.

1.5 TIMING

Project scope shall be completed no later than 90 business day from contract for services execution.

1.6 CREDENTIALS

Consultant shall identify the core team to be engaged on the project including their bios and credentials. Consultant shall also disclose any firms affiliated with Consultant for conflicts purposes. Consultant shall supply references for at least three (3) similar projects.

Familiarity with Information Technology needs in Tribal Gaming, Tribal Government and Tribal Health Care must be demonstrated. An insurance certificate identifying general liability coverage, errors and omissions coverage and workers compensation coverage (if applicable) shall be submitted as part of the proposal.

1.7 SUB-CONTRACTORS

The selected vendor (prime vendor) will be permitted the use of subcontractors with the following requirements.

- A. The prime vendor will be the sole point of contact with regards to contractual matters, including the performance of the services and the payment of any and all charges resulting for contractual obligations.
- B. The prime contractor will be responsible for the contract performance when subcontractors are used. However, when subcontractors are used, they must abide by all terms and conditions of the contract. If subcontractors are to be used, the contractor must clearly identify the subcontractor including length of time the subcontractor has been used by the prime contractor and other projects.

2 GENERAL INFORMATION

2.1 THE ORGANIZATION

There exist two distinct computing environments within the Stockbridge-Munsee community. One is on the Tribal side, and the other is the Casino. These must remain separated for compliance reasons due to the nature of Healthcare data and Financial/Gaming regulations. The Tribal datacenter environments consists of two clusters, one at the Admin Office (AO) and another at the Health Center (HC). As part of this proposal, AO and HC will be merged to form a single new cluster at the HC.

A. Casino Datacenter

a. Existing physical cluster

i. Currently three (3) HPE DL380 Gen10 servers

1. 256 GB of memory each
2. 2 x 12 core Xeon 6126 processors per server
3. VMware ESXi 6.5 U2 (Enterprise plus)

ii. Nimble HF20

1. Approximately 30 TB of effective storage
2. 10 Gb iSCSI connectivity

b. Existing VM workloads

- i. 183 vCPUs allocated (expected to decline to ~140 vCPUs due to existing projects)
- ii. 368 GB memory allocated
- iii. ~10.5 TB of used storage
- iv. Massive growth is expected in these workloads over the next 5 years

B. Admin Office Datacenter

a. Existing physical cluster

i. Currently two (2) HPE DL360 Gen9 servers

1. 160 GB memory each
2. 2 x 10 core Xeon E5-2640 v4 processors
3. VMware ESXi 6.0 U3 (Essentials+)

ii. HPE P2000 G3

1. Approximately 3.5 TB of effective storage, 100% allocated and 90% used
2. 6 Gb SAS connectivity to the hosts

b. Existing VM workloads

- i. 90 vCPUs allocated
- ii. 160 GB memory allocated
- iii. ~3.3 TB storage in use
- iv. 28 powered on VMs
- v. File and Domain services, primarily

C. Health Center Datacenter

- a. Existing VMware cluster
 - i. Three (3) servers, 2 HPE DL380 G7s and 1 HPE DL380 Gen8
 - 1. 48 GB memory in the G7s, 64 GB memory in the Gen8
 - 2. 2 x 6 core processors in each
 - 3. VMware ESXi 6.0 U3 (Essentials+)
 - ii. HPE P2000 G3
 - 1. Approximately 5 TB of effective storage, less than 1 TB free
 - 2. 6 Gb SAS connectivity to the hosts
- b. Existing VMware VM workloads
 - i. 50 vCPUs allocated
 - ii. 96 GB memory allocated to VMs
 - iii. ~4.1 TB in use
 - iv. 11 powered on VMs
 - v. File, domain, application management services
- c. Hyper-V Environment
 - i. 2 x Gridstore Hyperconverged Appliance
 - 1. 3 nodes each (Total of 6, A0/B0/C0 and A1/B1/C1)
 - a. Microsoft Server 2012 R2
 - b. 128GB memory (768GB total)
 - c. 3 x 2 x 6 core Intel Xeon E5-2620 v3 (36 cores total)
 - d. 3 x 2 x 8 core Intel Xeon E5-2640 v3 (48 cores total)
 - e. Utilizes 10GBASE-T connectivity, as Cat 6a copper ethernet
 - 2. Failover cluster
 - a. 3 x Gridstore nodes (A0, C0, A1)
 - b. 384GB memory available

- c. 40 physical cores
 - ii. 51 vCPUs allocated
 - iii. There is a mix of dynamic and static memory assigned VMs – as such, the assigned memory is 7TB maximum; however, if every VM with dynamic memory was assigned 8 GB, the total amount allocated would be 286 GB
 - iv. 23 VMs
 - v. Approximately 6 TB of data in use
- d. RDS environment
 - i. Nodes B0 and B1
 - 1. 128 GB memory each
 - 2. 28 total CPU cores
 - 3. Server 2012 R2
 - ii. Only node B0 is active for RDS sessions; B1 is configured similarly but the session collections utilize only a single node each, and only one is active at a time
 - iii. Primary access for Intergy and Great Plains
 - iv. Intergy and Great Plains data is stored directly on the Gridstore in a separate datastore for direct access via c:\clusterstorage for the RDS nodes. It cannot be directly converted so it must be migrated at an application level.
 - v. RDS profiles are stored on the cluster storage

D. Data Protection

- a. Local Veeam and Asigra backups to JBOD
- b. Veeam Replication offsite to Site2 (Backup and Recovery Vendor/Partner)
- c. Asigra Replication of any HIPAA data to Site2

2.2 SCHEDULE OF EVENTS

The following is a tentative schedule that will apply to this RFP but may change in accordance with the organization’s needs or unforeseen circumstances. Changes will be communicated by e-mail to all invited bidders.

Issuance of RFP	02/08/2019
Vendor Questions Due	02/22/2019
Vendor Walk-through	03/08/2019
RFP Proposals Due	03/29/2019

3 PROPOSAL PREPARATION INSTRUCTIONS

3.1 VENDOR'S UNDERSTANDING OF THE RFP

In responding to this RFP, the vendor accepts full responsibility to understand the RFP in its entirety, and in detail, including making any inquiries to the Stockbridge-Munsee Community as necessary to gain such understanding. The Stockbridge-Munsee Community reserves the right to disqualify any vendor who demonstrates less than such understanding. Further, the Stockbridge-Munsee Community reserves the right to determine, at its sole discretion, whether the vendor has demonstrated such understanding. That right extends to cancellation of award, if award has been made. Such disqualification and/or cancellation shall be at no fault, cost, or liability whatsoever to the Stockbridge-Munsee Community.

3.2 GOOD FAITH STATEMENT

All information provided by the Stockbridge-Munsee Community in this RFP is offered in good faith. Individual items are subject to change at any time. The Stockbridge-Munsee Community makes no certification that any item is without error. The Stockbridge-Munsee Community is not responsible or liable for any use of the information or for any claims asserted there from.

3.3 COMMUNICATION

Verbal communication shall not be effective unless formally confirmed in writing by a specified procurement official in charge of managing this RFP process. In no case shall verbal communication govern over written communication.

- 3.3.1 **Vendors' Inquiries.** Applicable terms and conditions herein shall govern communications and inquiries between the Stockbridge-Munsee Community and vendors as they relate to this RFP. Inquiries, questions, and/ or requests for clarification related to this RFP are to be directed in writing to:

Stockbridge-Munsee Tribal Secretary
N8476 Moh He Con Nuck Road
P.O. Box 70
Bowler, WI 54416

Attention: Jerilyn Johnson
Telephone: (715) 793-4387
Fax: (715) 793-4887
E-mail: jerilyn.johnson@mohican-nsn.gov

3.4 PROPOSAL SUBMISSION

Proposals shall be in writing and identify the bidder's pricing for providing the requested products and services, as well as other information requested in this RFP. Consultants shall identify to the Stockbridge-Munsee Community any discrepancies, errors, or omissions that may exist within this RFP. Consultants may recommend to the Stockbridge-Munsee Community any enhancements, which might be in the Stockbridge-Munsee Community's best interests. These should be included as alternatives in the final proposal.

Proposals must be delivered in a sealed envelope marked "Information Technology – Data Center Upgrade 2019" on the outside to:

Mail

Jerilyn Johnson, Tribal Secretary
Sealed Bid – Information Technology SAN Assessment 2018
Stockbridge-Munsee Community
N8476 Moh He Con Nuck Road
P.O. Box 70
Bowler, WI 54416

on or prior to 03/15/2019, 4:30 p.m. CST. The Stockbridge-Munsee Community shall not accept proposals received by fax or email.

Vendors are to submit 1 original copy of proposal marked "Original" and 2, marked "Copy." Each original and copy must be individually bound.

All materials submitted shall become property of the Stockbridge-Munsee Community and will not be returned to the Consultant.

The Respondent should not use any intellectual property of The Stockbridge-Munsee Community including, but not limited to, all logos, registered trademarks, or trade names of, The Stockbridge-Munsee Community at any time without the prior written approval of The Stockbridge-Munsee Community, as appropriate.

3.5 CRITERIA FOR SELECTION

The evaluation of each response to this RFP will be based on its demonstrated competence, compliance, format, and organization. The purpose of this RFP is to identify consultants that have the interest, and capability, to supply the Stockbridge-Munsee Community with the identified Scope of Work.

The successful consultant will be selected in accordance with tribal bid policies, as applicable. The Tribe reserves the right to revise the selection process and, in its sole discretion, to accept or reject any or all responses to this RFP. The Tribe may negotiate with or request additional information from any or all considered bidders. The Tribe may waive informalities or irregularities in a proposal. The successful bidder will be required to enter into a written contract with the Tribe. The successful bidder will be required to carry all appropriate insurance, such as professional liability, errors and omissions, general liability, vehicle and worker compensation coverages. The successful bidder must not engage in discriminatory conduct and may not be a barred contractor under tribal or federal contracting requirements.

Evaluation Criteria:

1. Capability of consultant to meet or exceed requirements set forth in Scope of Work.
2. Expressed interest in working with the Stockbridge-Munsee Community.
3. Ability of vendor to communicate its vision and capacity for establishing a relationship that addresses current and future needs and trends in the industry.
4. Apparent likelihood and desirability of proposal.