



CITY OF SAN JUAN CAPISTRANO

REQUEST FOR PROPOSALS (RFP) OF A STORAGE AREA NETWORK (SAN) SYSTEM WITH A VIRTUAL STORAGE SOFTWARE SOLUTION AND PROFESSIONAL SERVICES

PURPOSE

The Information Technology Division of the City of San Juan Capistrano ("City") is requesting proposals from experienced and highly interested firms to recommend, provide, and install a new Storage Area Network (SAN) and Virtualized Storage environment that will manage current needs and future growth for the City. The new system will need to support the virtualization of twenty (20) to thirty (30) servers, using VMware software as the software virtualization package.

BACKGROUND

The City of San Juan Capistrano, California, is a General Law city located in Orange County, 55 miles south of Los Angeles and 66 miles north of San Diego. The City has a permanent population of 38,000 residents. The City encompasses approximately 14 square miles of land area in south Orange County. The City is situated at the junction of two highways, the Ortega Highway (SR74) and Interstate 5. MetroLink and Amtrak, Southern California's rail service, offers connecting service from San Juan Capistrano to Los Angeles and San Diego Counties. The City of San Juan Capistrano provides for the billing and collection of all utility accounts for water and sewer services.

The Information Technology Division of the Administrative Services Department performs overall management of the City's information and telecommunications systems. Functions directly performed by the division include the purchase, installation, administration and maintenance of City servers, network infrastructure, personal computers, printers, and telephone system.

SCOPE OF WORK

Background

Hardware Specification

Most of the existing servers reside at the datacenter at City Hall. The servers, as identified in Appendix A, are a mix of Dell Windows 2003 and Windows 2008 servers ranging from 1 year old to 5 years old.

Data Network

City of San Juan Capistrano uses a 100% switched/routed network using Cisco Switches. The network core consists of five Catalyst-24/48 port switches with 1-GB fiber links to each of the IDF closets. Most IDF closets utilize 1 Cisco Catalyst switch to connect back to the core switches in City Hall. All switches are QoS capable and have 802.3af PoE (Power over Ethernet). Internet access for all City sites is redundant via a bundled set of Cox Business Internet lines and also a backup AT&T Managed Service line. The data network provides CAT 5/6 wiring and 1GB network speed to all of the networked PCs.

Server and Network Diagram has been provided ('Appendix A').

Computing Environment and Applications

City of San Juan Capistrano's server environment consists of Windows Server 2000, Server 2003 and Server 2008. Email is provided by Microsoft Exchange Server 2003 on Windows Active Directory 2003. The desktops and laptops (approximately 120 total) are running Windows XP with at least service packs installed with plans to migrate to Windows 7 next fiscal year. The desktops use Outlook 2007 as their email clients. The desktops run a mix of both standard applications and proprietary applications.

The City currently backs up data using a disk-to-tape library and the library is directly connected to the backup server. Symantec BackupExec version 2010 is the software used for backups.

SAN Specifications - Core Storage

- System to be configured with a minimum 10TB of storage with additional storage such as 7K RPM SATA drives equaling up to an additional 20TB.
- System must be rack mountable in a standard 19 inch data center rack.
- Please list total raw expandable storage capacity utilizing the proposed controllers and not adding additional controllers.
- Minimum eight (8) host Fibre Channel ports per array. Expand on multiprotocol (CIFS, NFS, iSCSI, FCP, etc).
- Expand on unified storage functionality.
- Capable of 'Dial Home' or 'Call Home'.
- Redundant AC power supplies.
- All necessary interconnecting cabling to connect clustered controllers to disk enclosure.
- All necessary AC power cabling from unit to customer power supplies.
- All necessary software to setup, administer and monitor SAN to create and manage LUNs.
- From a SAN controller perspective, the proposed solution should allow at least 250 high available hosts to be connected.
- The proposed solution should allow Host/Server connectivity via 4GB Fibre Channel and also 1GB iSCSI.
- The proposed solution should allow Snapshots to occur on all volumes without full volume cloning occurring. Snapshots should be readable and writeable. The SAN should be able to hold a minimum of 1,000 snapshots per array.
- The proposed SAN should allow RAID levels to be changed on the fly without taking down the server to which the volumes are attached or copying or cloning data.
- Should support backup/restore of data volumes/LUNs in less than 10 seconds, regardless of size
- Backups must not impact performance.
- Should support block-level incremental replication of data over TCP/IP for backup and/or DR.
- Should support storage virtualization with multiple protocols (such as SAN and NAS) in the same system.
- Should be able to clone data rapidly while minimizing physical storage space consumption without using additional space upon creation of the clone; only changes to the clone's data should take up space.
- Should reduce storage requirements for server virtualization by more than 50% on native array storage. Expand on data reduction and/or compression technology.
 - Should allocate storage on a just-enough or just-in-time basis, even if the storage does not physically exist, generally referred to as "thin provisioning". Thin provisioning should work on all operating systems without agents on servers.

- o Should support thin provisioning of data as part of the normal storage provisioning process; thin provisioning should not place any restrictions on storage volumes.
 - o Explain the functionality to deduplicate data on both primary and secondary storage at a very granular level, on both primary and secondary storage at both the block and file level.
- Should support the backup of VMware without streaming data or the use of VMware VSphere.
- Should be able to grow/shrink data volumes without application downtime.
- Should enable application administrators (those running Microsoft, VMware, or other enterprise applications) to backup/restore and replicate their own data without having to involve a backup or storage administrator.
- Explain the ability to enable end-user self-service or level-1 help desk support for users for recovering data that was accidentally corrupted or deleted from home directories or public folders.
- Should support double disk failure protection with the minimum amount of RAID space overhead.
- Should support lost write protection.
- Should support solid-state as well as FC and SATA disk drives, automated tiering, and transparent movement of data without manual administrator involvement in the same system.
- Should support native asymmetrical data replication.
- Expand on FCoE functionality.
- Should support SAN service-level management and enforcement, including auto discovery of SAN switches, hosts, and storage arrays, without deploying host-based agents.
- Should support disk-based data backup using existing backup software applications, tape libraries, and procedures, without the need to change process at speeds up to 8TB/hour.
- Should support movement of disk-based backup data to tape in a manner that efficiently utilizes tape and does not create extra jobs for the backup servers to process.
- Expand on the support of a global namespace across unstructured data (CIFS/NFS file data) in the enterprise.

TIMELINE

<u>Schedule for Vendor Selection</u>	<u>Date</u>
Release of Request for Proposal	August 4, 2010
Last Day for Submission of Questions	August 12, 2010
City's Response to Questions	August 18, 2010
Deadline for Receipt of Proposals	August 26, 2010 at 4:00pm
Vendor Demos and Interviews	August 30 to September 2, 2010
Evaluation	September 7 to September 10, 2010
Tentative Notice of Intent to Award	September 14, 2010
Tentative Start Date	TBD (Pending Council Approval)

The dates subsequent to receipt of proposals may be adjusted by the City without further notice.

SOLUTION OVERVIEW

Provide an overall summary of your proposed solution (model numbers, sizing) including proposed software options. If the solution consists of multiple components (storage systems, replication appliances, software products, switches), please explicitly describe each component and answer the remaining questions in the attached Functional Qualifications workbook (Appendix C) on a per-component basis, where applicable.

SAN Recommended Features

Vendors should recommend a SAN solution that best fits the requirements as described in this RFP. However, it is recognized that there are many choices when looking at the SAN options offered by manufacturers. Vendors have the option of proposing more than one SAN solutions and should identify costs for each solution. These costs should include the line item detail of all costs of the hardware plus any other costs associated with implementing that proposed solution.

Features of the SAN includes iSCSI and Fiber channel protocols, system and project related application tools, and ease of use. The SAN should have the capability of accepting iSCSI and fiber channel protocols. RAID specifications should adhere to manufacturer's best practices that provide both redundancy and performance.

There are many different companion software programs that interface directly with SAN systems and there are a few of those applications that need to be part of this proposal. Application tools such as restoring snapshot files or volumes quickly, enhancement for overall administration of the SAN, disaster recovery and the complementary existing tape backup schemes, clustered failover, and the elimination of duplication of data are a must. The City wants a SAN product that is easy to administrate either natively or with the help of software related programs.

Warranty specification

All equipment in this proposal must have a one (4) year, 24/7, four (4) hour response on all parts, onsite support and performed by certified trained technicians. This is the city's standard when it comes to warranty of server and SAN related equipment. Any hardware component covered under the specified warranty must be capable of being replaced within four (4) hours of manufacturer service call. Proposed SAN must be new and unused goods.

Software Specification

The virtualization software to be provided is VMware's vCenter Server. For virtual server redundancy, please specify VMware's vSphere products. Depending on how many physical servers are being proposed, please license them accordingly so that server virtualization can be legally operated within the defined specifications of this RFP.

Professional Services Requested

Services include the installation and full operation of one (1) SAN system, full training for in-house staff, complete documentation of proposed services, and familiarization of all products within this proposal's scope. Proper functionality tests shall be conducted to verify connectivity between the blade enclosure and servers. Any remote management software or system shall be configured so that City Staff can manage the system remotely.

Term of Engagement

A two to three month contract is expected for the implementation.

Subcontracting

All proposed subcontracting must be detailed in the firm's proposal. No subcontracting will be allowed without the express prior written consent of the City of San Juan Capistrano.

Documentation

Knowledge transfer of all operations, installation of equipment, and software configurations shall be conducted with appointed city personnel and vendor. Vendor shall generate all necessary documentation that is crucial to design, install, configuration, and operation. This includes a complete software and equipment inventory of proposed products.

Visual Identification

All necessary components that require visual identifications shall be labeled appropriately. Vendor shall develop a labeling scheme that is simple yet logical to read.

Energy Efficiency

San Diego Gas & Electric (SDG&E) provides financial incentives to its customers for implementing energy efficient data centers using virtualized servers. As part of this process, the vendor shall provide the documentation necessary to fulfill the requirements of this incentive program. This documentation includes an inventory and specifications (chassis make, model, server CPU count, CPU speed, RAM total, and disk space) of the proposed solution.

Existing Hardware

Vendor shall evaluate existing hardware to determine viability for use for other applications within the City. Any potential for trade-in or recovery of value should be proposed along with the process and any associated cost of such disposal.

Right to Reject Proposals

The City of San Juan Capistrano reserves the right without prejudice to reject any or all proposals, and not to provide any feedback or comments at its discretion.

CONTRACT FOR SERVICES

The successful proposer will enter into a Personal Services and Support agreement(s) acceptable to the City. See Appendix B

PROPOSERS LIST

In order to assure that interested firms receive up-to-date information including changes to this RFP, deadlines and answers to questions, interested proposers must advise the City of their intention to submit a proposal along with contact information. If you intend on responding to this RFP, send the name of this RFP, your firm's name, contact name, fax number, and e-mail address to:

Pooja Gupta
City of San Juan Capistrano
32400 Paseo Adelanto
San Juan Capistrano, CA 92675
pgupta@sanjuancapistrano.org

In addition, any questions, interpretations, or clarifications, whether administrative or technical, about this RFP must be requested in writing prior to the date indicated in Timeline. They can be mailed or emailed to Pooja Gupta at the address above. All pertinent questions will be answered in writing and conveyed to all proposers.

PROPOSAL REQUIREMENTS

Basic Requirements

To be considered responsive to this RFP, proposer must submit proposals in the format identified in this section. All requirements and questions in the RFP must be addressed and all requested data must be supplied. The City reserves the right to request additional information that, in City's opinion, is necessary to assure that the proposer's competence, number of qualified employees, business organization, and financial resources are adequate to perform according to contract.

All proposals must be typed and the content must be concise. Proposals should not include any unnecessary promotional material. Restrict the proposal to less than 25 pages, including all responses, cost information, reference work and information about the firm and individuals assigned to the project.

Proposal Format

Proposal should follow the format and order outlined below.

a) *Cover Letter*

The cover letter shall include a brief general statement of intent to perform the services and confirm that all elements of the RFP have been reviewed and understood. The letter should include a brief summary of proposers' qualifications and proposers' willingness to enter into a contract under the terms and conditions prescribed by the City of San Juan Capistrano Personal Services Agreement (Appendix B). The letter should be signed by an individual who can bind the proposer contractually.

b) *Table of Contents*

The table of contents shall identify the contents of the proposal in a format consistent with the proposal requirements and format set forth herein.

c) *Exceptions*

Any and all exceptions to the RFP must be listed on an item-by-item basis and cross-referenced with the RFP document. If there are no exceptions, proposer must expressly state that no exceptions are taken.

Proposal Content

a) SECTION I – EXPERIENCE

This section shall contain responses to the minimum proposer qualifications included in Section III – Proposer Qualifications of the RFP, a general overview of the proposer's qualifications, and shall include, but not be limited to, the following information:

- 1) Proposer name, address, telephone number, and authorized representative(s).
- 2) Proposer shall identify the number of years of experience in providing equipment and services, similar in size and scope to that requested in this RFP.
- 3) Proposer References: Provide at least three (3) client references for which the proposer has provided similar services. References shall include date and description of service, project location, completion dates, organization's name, contact person, title, address, email address, and telephone number.

b) SECTION II – PERSONNEL

Proposer shall identify the number of working employees who will be assigned to the work-site and identify the names of the project manager and key personnel who shall be assigned to this project if a contract is awarded, including resumes. State the location of the office from which the work on this engagement is to be performed and the number and nature of the professional staff to be employed in this engagement on a full-time basis and the level of time commitment.

Describe the roles and responsibilities of the City of San Juan Capistrano personnel in the implementation. Indicate the number and the types of resources required along with the estimated percentage of time each resource would need to spend on this project. State the expected experience and skill levels of the City of San Juan Capistrano information technology resources that will be needed to support this implementation.

c) SECTION III – QUALITY OF SOLUTION PROPOSED

Proposer shall provide a detailed description of the approach or plan to be used in response to Scope of Work. The prepared plan should demonstrate an overall understanding of the scope of work to be performed and will be judged on clarity, comprehensiveness, and presentation of materials in a thorough and concise format.

d) SECTION IV – FUNCTIONAL QUALIFICATIONS

The functional qualifications spreadsheet must be fully completed. Vendors should use the format provided and add explanatory details as necessary in a separate spreadsheet using the qualification number as a reference. The following answer key should be used when responding to the qualifications:

Column C Coding

Y = This feature is provided

N = This feature cannot be provided.

M = Modification

T= Third-party software

W= Work around

A= Available in next version (include estimated date of release)

C= Customization (specify below using codes) would be required at additional cost as follows:

C1 – Additional Cost up to \$500

C2 – Additional Cost \$501 - \$1,000

C3 – Additional Cost \$1,001 - \$5,000

C4 – Additional Cost over \$5,000

Note: Any requirement that is answered with a symbol other than what is listed above will be treated as a negative/non-response.

e) SECTION V - COST SECTION

Proposer is expected to quote a firm-fixed price for the equipment and services. All costs associated with the services of this contract must be itemized pricing which includes list price, discount percentage, and final price. It should include basic system/storage price, extras such as options, data services, maintenance, and support. Projected hours for completion of the project

shall also be included. Additionally, include a fee schedule for possible additional services. Please break down the cost by the following:

- Equipment (including model names/types/numbers)
- Software
- Installation
- Warranty
- Maintenance
- Other Reimbursable Costs (i.e. shipping, travel, etc.)

SUBMISSION INSTRUCTIONS

Proposals should be submitted per proposal format outlined above. One (1) signed paper original marked 'Master', four (4) paper copies and one (1) electronic copy (on disk or via e-mail) of your proposal, including all supporting documentation, to:

Pooja Gupta
City of San Juan Capistrano
32400 Paseo Adelanto
San Juan Capistrano, CA 92675
(949) 443-6302
pgupta@sanjuancapistrano.org

Proposals submitted by mail should be post-marked sufficiently in advance of the proposal due date to ensure delivery to the City prior to the specified due date. The City assumes no responsibility for delay in delivery of the proposal by U.S. Mail or any other service. LATE PROPOSALS WILL NOT BE ACCEPTED.

Proposals shall be identified on the outside of the package/envelope with the title "Storage Area Network" and the name of the Vendor.

Costs for developing and submitting proposals are entirely the responsibility of the Vendor and shall not be chargeable in any manner to the City of San Juan Capistrano.

The contents of the RFP, all addenda, and the response from the Vendor will form the basis of a contractual obligation. Failure of the successful Vendor to accept these obligations in a contractual agreement may result in cancellation of the award.

Responses to this RFP become the exclusive property of the City and subject to the California Public Records Act. Those elements in each proposal which are trade secrets as that term is defined in Civil Code section 3426.1(d) or otherwise exempt by law from disclosure and which are prominently marked as "TRADE SECRET", "CONFIDENTIAL", or "PROPRIETARY" may not be subject to disclosure. The City shall not in any way be liable or responsible for the disclosure of any such records including, without limitation, those so marked if disclosure is deemed to be required by law or by an order of the Court. Proposers which indiscriminately identify all or most of their proposal as exempt from disclosure without justification may be deemed non-responsive.

In the event the City is required to defend an action on a Public Records Act request for any of the contents of a proposal marked "confidential", "proprietary", or "trade secret", the proposer agrees, upon submission of its proposal for City's consideration, to defend and indemnify the City from all costs and expenses, including attorneys' fees, in any action or liability arising under the Public Records Act.

Vendors shall place in a separate envelope clearly identified as "confidential" all financial statements, copyrighted material, trade secrets or other proprietary information that it asserts is exempt from disclosure under the Public Records Act. The City of San Juan Capistrano will attempt to protect from disclosure the identified information within our ability under the Public Records Act.

EVALUATION CRITERIA

The City will review proposals and determine those that are responsive. The City will select a vendor who in its sole judgment, best suits the needs of the City. The evaluation criteria include, but are not limited, to the following:

- a) Experience - Consideration will be given based upon the firm's experience in successfully recommending, providing, and installing systems comparable to the systems and solutions being solicited in this proposal. Customer references may be contacted and evaluated as part of this section.
- b) Personnel - Additionally, consideration will be given based on the professional, technical, and educational qualifications of personnel that will be assigned to the project based on the resumes provided. Proposer should demonstrate that all key personnel have been successfully involved with projects of similar scope and magnitude.
- c) Quality of Solution Proposed - This category will consider the overall quality of the equipment and configuration proposed, including a demonstrated understanding of the purpose, scope and objective of the project and the ability to make quality recommendations and deliver within the timeframe (schedule). Partial or incomplete solutions will not be considered.
- d) Total Cost - The City considers cost-effectiveness to be a very high priority.

The City may wish to conduct interviews with selected finalists. Finalists will be expected to have the key project team members available for the interview.

Award of this contract will be dependent on City Council approval.

APPENDICES

APPENDIX A - Existing Servers & Network Diagrams

APPENDIX B - Sample Personal Services Agreement

APPENDIX C – Functional Qualifications spreadsheet