

CITY OF GALLATIN

REQUEST for PROPOSAL

SERVER VIRTUALIZATION BUILDOUT

JUNE 2013

Scope of Work:

The City of Gallatin is seeking proposals for a complete “turn-key” build-out of its remaining on-site physical servers to virtual servers. There are 14 virtual servers currently running. There are 7 physical servers remaining to be converted to virtual. This project also includes adding sufficient on-line storage capacity (SANs) to accommodate all remaining existing data currently located on physical servers plus anticipated growth through end of calendar year 2015.

The successful vendor shall employ every expertise and facility to leverage the greatest potential from *existing* virtual equipment so as to minimize requirements for additional equipment while employing industry standard best methods and practices. On-site survey and discovery are strongly encouraged.

As part of this build-out phase, all backups will be transitioned to LTO5 tape for off-site storage. Current backup mandated requirements are full, daily, 2 week rotation. Installation and configuration of the backup tape device is a part of this proposal, including setup and configuration of the VMware/Veamm backup/replication software, new tape backup software and demonstration of successful backups to tape. This work must be accomplished prior to any further migration of physical to virtual.

Existing Virtual Environment:

Hardware:

The current virtual environment is a single HP C7000 chassis with (qty 3) HP BL460c Gen8 blade servers (13 available blade slots) connected to (qty 2) HP P4300 G2 SANs locally and (qty 1) HP P4300 G2 SAN at a remote site for backup. C7000 power is **208 volt A/C** provided through a pair of HP R5KVA 3U L630 UPSs.

All on-site virtual equipment is installed in a single rack, “C”, occupying 24 U of space. The new SAN provided under this proposal shall be installed in the same rack along with existing equipment. Backup server and tape library shall be installed in an adjoining rack “D.”

Additional UPS, *if required for power capacity*, may be installed in an adjoining rack "D". It is anticipated that sufficient UPS capacity for the additional SAN, relocated SAN, new tape library and new tape server is available through an existing, un-used **110 volt** UPS on site (qty 1) APC 2200XL, (repowered 02/01/2013). Some 220 volt capacity remains available in the pair of HP R5KVA 3U L630 UPSs. **Vendor shall confirm this availability, viability and its sufficiency – both in terms of wattage and available receptacles.**

The off-site SAN (4 U) will be relocated to on-site and incorporated as part of the overall combined storage capacity. It will also be installed in rack "C" along with the new SAN hardware. The physical relocation **is not** a part of this proposal. Integration of the existing SAN, *after migration of all backups over to tape*, with the new and existing onsite equipment **is** a part of this proposal.

Existing Software:

Management software – Vmware, ver 5.1
Backup and replication software – Veamm, ver 6.5.0.106
OS – Microsoft Server 2003 & Server 2008R2
Microsoft SQL Server – 2 instances
Microsoft Exchange 2007

Additional Hardware & Software for Server Build-out:

It is ***anticipated*** that the following will be required for build-out. *It is the vendor's responsibility to confirm, and resolve, any conflict, omissions or foreseen performance degradation between existing and proposed equipment prior to submitting a response. Notwithstanding the following, due care shall be exercised to avoid any system performance or redundancy (RAID 10) degradation as a result of "mixing" incompatible hardware devices.*

Blades – 1 each
SAN – 16TB (nominal) **usable** capacity, fully compatible w/ existing SAN drives (15K RPM)
Switches – 2 each for C7000 chassis
Mezzanine cards – 5 each
UPS battery backup – 1 **possibly**, verify existing available spare capacity on site
OS – 8 copies – **TO BE FURNISHED BY CITY OF GALLATIN through existing licensing agreement**
VMware esxi – 2 lic
Warranty/support on all **new** hardware/software (except tape backup software) – 5 years
Warranty/support **extension on existing** – 1 year (+/-) to co-term on all existing w/ new

Important note – The above itemization is based upon staff experience, knowledge of system and input from Phase I vendor. **It is NOT expressed to be absolutely complete or accurate for this particular build-out.** All vendors are

strongly encouraged to do discovery so as to ensure a complete solution w/o any omissions, errors or conflict.

**A breakdown of original HP VM acquisition from 2012 is attached.
A list of remaining physical servers to convert is attached.**

Tape Backup Drive Autoloader:

As part of this proposal, a new LTO5 tape drive autoloader unit shall be furnished, installed, connected, configured, and tested. A sample typical, but representative, backup job shall be created, tested and demonstrated to staff. This work must be completed prior to the migration of any further physical devices **and** prior to the relocation of existing SAN from its current off-site facility (which will occur prior to, but no later than, September 12, 2013)

The tape autoloader unit shall be as follows (or most current comparable model):

Manufacturer: Hewlett Packard
Model: MSL2024 Ultrium 3000 - SAS
Drives: single
Capacity: 24 slots / 2 magazines
Interface: SAS
Power: ~110 volt AC

A supply of the following shall be included:

Tape, LTO5 media – quantity 50

All tapes shall be from one of the following: HP (preferred), Sony, TDK, Dell, Fuji.
All tapes must be clearly certified as compatible with the tape autoloader drive unit. **Brands shall not be mixed.**

Provide detailed specifications of tape autoloader with response.

The tape unit shall be installed in existing Rack "D" – immediately adjacent to the virtual equipment (Rack "C")

Existing Dell LTO3 tape backup autoloader unit shall remain in service for failover and/or use in discovery.

Tape Backup Server:

As part of this proposal, a new rack-mount server shall be provided and installed for the sole dedicated purpose of "managing" the backup process from virtual and physical servers to the LTO5 tape autoloader. The server shall be installed in Rack "D" immediately adjacent to the new tape autoloader. Connection and transfer interface, to

be included, shall be SAS cable. *Server shall be capable of connecting to and managing/operating 2 (two) tape libraries and/or drives simultaneously.*

The dedicated server shall be as follows:

Manufacturer: Hewlett Packard

HDD Capacity: minimum of 2 (two) 300GB for a RAID I array

RAM: 8 GB

Power supply: ~110 V, redundant and hot-swappable

Processor(s): shall meet or exceed, in every respect, the system requirements and/or software manufacturer's *recommendations* (if higher) of the recommended backup software *and* tape autoloader so as to maximize backup throughput rates and minimize time required for backups.

Tape-to-Server Interface: SAS

Provide detailed specifications of server proposed in response.

Existing tape backup server shall remain in service for failover and/or discovery.

Tape Backup Software:

As part of this proposal, respondents shall submit backup software alternatives from a minimum of three (3) different manufacturers/developers. All alternatives shall be fully compatible, functional and operable with the *existing* hardware and software; the *proposed* hardware and software – for *both* physical and virtual servers and for SANs as sources and *both* tape and SANs as destination storage media, *without the use of any additional software or hardware.*

All solutions proposed shall provide for fully unattended backups to tape. Software shall be capable of running multiple, concurrent jobs to multiple drives, libraries/media sets. Software shall be capable of deduplication. No “beta” versions shall be proposed or considered.

When submitting software alternatives, they shall be ranked in order of respondent's preference based upon known and demonstrable metrics, such as: ease of installation setup, ease of routine job setup, overall intuitiveness, operational reliability, product technical support, flexibility, *compatibility with selected HP tape library*, capability, value, etc. Respondent shall attach, as part of their response, a written justification, substantiation or explanation for their selected number one (highest, best) recommended backup software solution. Cost is a factor - but not necessarily *the* determining factor.

One full year of manufacturer's support shall be included with the software costs submitted. Successful respondent shall remain a contact for support, at no additional cost, for one full year, *in addition to* the manufacturer's support included.

Respondent shall be prepared to provide an on-site demonstration to City staff and provide a trial copy for installation and setup on City systems of the "first" rated solution proposed. Final selection of the software will be made by the City IT staff, but done so in close collaboration with the City's network administrator consultant and the successful respondent.

Compatibility and Interoperability:

All hardware and software (except tape backup software) provided as a solution to this RFP shall be of the same manufacturers/developers as currently in service within the City of Gallatin virtual environment. All hardware is from Hewlett-Packard. All software is from Microsoft, VMWare and Veeam.

- Any updates to existing software or firmware required for full functionality shall be included and performed.
- Any updates or alterations to existing hardware or ancillary devices required for full functionality shall be included and installed.
- Any additional devices, appliances or ancillaries required for full functionality shall be included and installed.

Absolutely no claims for extras or omissions of any kind shall be entertained.

Vendors may, *and are encouraged to*, request a visit to the datacenter.

Warranty and Support Extension:

The existing equipment, placed in to service September 2012, (invoiced 08/23/2012) is under a 5 year service and support agreement through HP. This proposal shall include *extending* those agreements to co-term with equivalent 5 year service and support for all new equipment. All warranty/support agreements shall be registered in the name of the City of Gallatin – not the Vendor name.

Documentation:

All documentation for all hardware, software, accessories or ancillaries, provided in response to this RFP, shall be carefully preserved, collected, collated and presented to City IT staff as needed or at sign-off/hand-off.

In addition, all configuration details and settings – sufficient for a complete reconstruction after a catastrophic loss - including, but not limited to, IP addresses, user names, passwords, SAN configuration, etc. shall be completely, clearly and concisely documented and presented to City staff upon completion of work. Delivery shall be both electronic and paper format.

Proposal Requirements:

- Proposal shall be valid for 90 days from required date of submittal.
- Include cost breakdowns for hardware, software, warranty, install/set-up services, training, etc. *Use submittal form provided herewith.*
- Include warranty/support terms for new and extended coverage.
- This is a “turn-key” project – **all costs**, for all hardware, software, licenses (except as noted for OS), warranties, labor, and professional services shall be included for, but not limited to, shipping, handling, unpacking, installation, connection, set-up, initialization, burn-in, configuration, replication, loading of software, migration (P2V), testing, debugging, training of, and hand-off to, City personnel. City staff *may* assist as part of training – but bear no obligation.
- Any hardware shipments displaying evidence of mishandling shall be rejected.
- All hardware, software and ancillaries provided shall be new and un-used.
- Provide hourly rate for on-site training/support beyond acceptance of project completion.
- Provide cost for an **optional**/additional “test” blade complete, installed, functioning and ready for use.
- Absolutely no claims for omissions or extras will be entertained for any reason.

Milestones - Anticipated:

The following are anticipated milestones. The relocation of SAN from the remote site and its dependencies (backups) are essentially fixed. The successful vendor shall provide a timeline of events for delivery, installation, initial setup, testing, configuration etc.

07/03/2013 – RFP responses

07/17/2013 – Award bid (*contingent on approval of City FY budget*)

09/06/2013 – LTO5 tape library in place, tested and ready

09/09/2013 – Transition backups to LTO5 library

09/12/2013 – Relocate SAN from remote site – THIS IS A FIXED DATE

09/16/2013 – Incorporate relocated SAN, begin installing new hardware

09/23/2013 – Testing, configuration, migration

10/11/2013 – Hand-off to City staff

Payment Schedule:

Payments for project will be processed as follows, based on cost breakdown provided:

50% of **hardware** costs 30 days after physical installation of hardware

50% of **software and warranty/support** costs after initial setup

50% of **professional services** cost after initial setup

50% of remaining above balances after migration, testing and debugging to satisfaction of City

100% of remaining balances 30 days after written acceptance by City of Gallatin

Submittals:

Proposals shall be received no later than **Wednesday, July 3, 2013, 2:00 PM** at which time they will be opened and read aloud (Gallatin City Hall, 132 W. Main St., Gallatin TN 37066, Room 114 – “History Room”). Proposals shall be submitted in a sealed envelope, *clearly* marked **2013 SERVER VIRTUALIZATION BUILDOUT**, contain 2 paper copies and 1 digital copy on **CD media**. Submittals shall **NOT** be sent via electronic mail or facsimile.

Review and Basis for Award:

The City of Gallatin will award the work, as a single source, to the lowest responsible respondent pursuant to the Municipal Purchasing Act of 1983. Reviews will consider the following factors:

- Completeness of response
- Clarity of response
- Justifications provided
- Exceptions to Scope
- Costs
- Prior experience with vendor/respondent

The City of Gallatin reserves the right to reject any and all proposals, any part of any proposal, and to waive any informality or Scribner's error found therein. ***Any award is subject to pending funding in, and approval of, the 2013/2014 FY City budget.***

Questions regarding this RFP:

Direct ***all questions*** regarding this RFP – *in writing* - to either of the following:

Matthew B. Foley matt.foley@gallatin-tn.gov
Cameron M. Calvert cameron.calvert@gallatin-tn.gov

Information Technology Division / Finance Department
City of Gallatin
132 W. Main Street
Gallatin TN 37066

ALL QUESTIONS MUST BE SUBMITTED IN WRITING. Email is preferable, US post is acceptable. ALL QUESTIONS WILL BE ANSWERED IN WRITING (via email only) AND SHARED WITH ALL KNOWN POTENTIAL RESPONDENTS. NO VERBAL QUESTIONS WILL BE ENTERTAINED. NO QUESTIONS POSED AFTER

ONE (1) WEEK (7 calendar days – Wed, June 26, 2013) PRIOR TO DEADLINE WILL BE ENTERTAINED. NO EXCEPTIONS.

To ensure receipt of responses to questions or other pertinent information, *please register your intent to respond to this RFP with:*

J. R. Smith jr.smith@gallatin-tn.gov
Purchasing Agent
Finance Department – Room 105
City of Gallatin
132 W. Main Street
Gallatin TN 37066

Submittal Requirements:

This RFP document must be returned in its entirety as part of your submittal. Any omissions or fields left blank are a basis for summary rejection.

Exceptions, justifications or qualifications to the RFP may be submitted for consideration on separate sheets over the signature of the authorized agent submitting the formal response.

Submit all responses, clearly marked, as follows:

2013 SERVER VIRTUALIZATION BUILDOUT

J. R. Smith
Purchasing Agent
Finance Department – Room 105
City of Gallatin
132 W. Main Street
Gallatin TN 37066

Vendor Response:

Total Lump Sum cost for Build-out \$ _____
Complete & attach breakdown of Hardware/software/warranty/services/etc.

Hourly cost for additional on-site training \$ _____/hour on site
(inclusive of travel and meals)

Optional extra (1) Test Blade \$ _____
(above optional blade cost is all inclusive of blade, ancillaries, including software, licenses, mezzanine cards if required, installed, configured & ready for use)

Company Name: _____

Physical Address: _____

Office telephone: (_____) - _____ - _____

Contact email: _____@_____

Attest – *By my signature below I attest that I have read, fully understand and agree to the requirements, stipulations, expectations and terms of the RFP as set out herein. Costs for all hardware, software, shipping, handling, installation, setup, configuration, training and ancillary devices/accessories have been considered and included for a fully functional “turn-key” project. No claims for extras or omissions shall be submitted nor entertained.*

Signature: _____
(Agent authorized committing to above terms)

Printed Name: _____

Title: _____

Date: _____ / _____ /2013

2013 SERVER VIRTUALIZATION BUILDOUT

Lump Sum Cost Breakdown

THIS PAGE MUST BE COMPLETED AND INCLUDED WITH YOUR RESPONSE!

Hardware:

Blade/SAN & components \$ _____

Tape Autoloader & components \$ _____

Backup server & components \$ _____

Software:

VMware, etc. \$ _____

Backup 1st \$ _____

Mfgr - _____ *

Backup 2nd \$ _____

Mfgr - _____

Backup 3rd \$ _____

Mfgr - _____

* Attach justification for 1st choice.

Warranties/Support: \$ _____

Professional Services: \$ _____

TOTAL LUMP SUM \$ _____
(Carried to preceding Response page)

(Including 1st choice backup software)

Attach exceptions, justifications or qualifications, over the signature of the authorized agent, on separate sheets following this page.

- End of RFP -

Breakdown of original HP VM acquisition - 2012

Qty	Part No./Name	Description
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C7000 Option

Primary Site Blade Chassis

1	507019-B21	HP BLc7000 CTO 3 IN LCD ROHS Encl
3	641016-B21	HP BL460c Gen8 10Gb FLB CTO Blade
3	662079-L21	HP BL460c Gen8 E5-2630L FIO Kit
3	662079-B21	HP BL460c Gen8 E5-2630L Kit
36	690802-B21	HP 8GB 2Rx4 PC3-12800R-11 Kit
4	438030-B21	HP GbE2c Layer 2/3 Ethernet Blade Switch
4	499243-B21	HP BLc7000 2450 Watts High Efficiency Power Supply
2	412140-B21	HP BLc Encl Single Fan Option
1	413379-B21	HP BLc7000 1 PH FIO Power Module Opt
3	684214-B21	HP Ethernet 10Gb 2P 560FLB FIO Adptr

Vmware Software

1	BC398AAE	VMw vSphere Ent Kt 6P 3yr9x5 E-LTU
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HP 7.2TB ISCSI SAN

3	BK716A	HP P4300 G2 7.2TB SAS Starter SAN (15k Drives)
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HP 5yr service & support

1	HA109A5	HP 5y Support Plus SVC
3	HA110A5 1N5	LHN P4300 SAN Solution Support
1	HA101A5	HP 5y Next Day HW Support
1	HA101A5 7FX	c7000 Enclosure HW Supp
3	HA101A5 7XE	BL4xxc Svr Bld HW Support
1	HA110A5 QA8	VMw vSphere Ent Kt 6P 3yr9x5 SW Supp
3	615729-B21	HP Ethernet 1Gb 4P 366M Adptr

Qty	Part No./Name	Description
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UPS with 5 year support

2	AF460A	HP R5KVA UPS 3U L630 HV NA/JPN Kit
1	HA101A5	HP 5y Next Day HW Support (Support included with previous purchase of C7000)

REMAINING PHYSICAL SERVERS TO CONVERT

Used Storage (GB)	Server/Drive	(GB)
7234.87	Used Virtually	7234.87
(4720.00)	Used For Backups	(4720.00)
59.00	Galfp c:\	
1290.00	Galfp e:\	Total Used 1349.00
20.00	Gpddc02 c:\	
3460.00	Gpddc02 e:\	
1310.00	Gpddc02 f:\	Total Used 4790.00
75.20	Laserfiche c:\	
774.00	Laserfiche e:\	Total Used 849.20
39.00	Galweb c:\	
18.00	Galweb e:\	Total Used 57.00
32.00	Galweb02 c:\	
1.00	Galweb02 e:\	Total Used 33.00
27.40	Galex01 c:\	
350.00	Galex01 e:\	Total Used 377.40
32.00	Gpdsq101 c:\	
44.00	Gpdsq101 e:\	Total Used 76.00
10046.47	Total used	10046.47

These numbers are as of 05/28/2013