



ADDENDUM #1 To PROPOSAL #18-12

Virtualization of Servers

This becomes a permanent part of the Basic Bid Document.

- #1 – Existing server inventory, see Attachment A**
- #2 – Requirements/Specs needed for new applications that will be added (ONESolution and Questys), see Attachment B**
- #3 – List of applications that are currently run on our SAN, see Attachment C**
- #4 – Generic VDI base load information, see Attachment D**
- #5 – List of applications that will be on the new SAN, see Attachment E**
- #6 – Clarification on assessment question, see Attachment F**

Attachment A

City of Peoria - Server Specs

			Disk Space on SAN (ALL SERVERS BOOT FROM SAN)
MS Windows Servers			
HP Proliant ML350	2.5 GB	Dual Core-PROCESSOR_IDENTIFIER=x86 Family 15 Model 2 Stepping 9, GenuineIntel Description: Performs backups for all servers - Netware and Windows	disk 0 - 35.06 GB disk 1 - 200.11 GB
HP Proliant DL320 G5	4 GB	Dual Core-PROCESSOR_IDENTIFIER=x86 Family 15 Model 6 Stepping 5, GenuineIntel Description: Sequel DB, does indexing of images	disk 0 - 25.01 GB disk 1 - 200 GB
HP Proliant DL380 G5	4 GB	2 Quad Core-PROCESSOR_IDENTIFIER=x86 Family 6 Model 23 Stepping 6, GenuineIntel Description: Sequel DB, runs proprietary software for city clerks office	disk 0 - 30.05 GB disk 1 - 75.00 GB
HP Proliant DL120 G5	4 GB	Quad Core-PROCESSOR_IDENTIFIER=x86 Family 6 Model 23 Stepping 10, GenuineIntel Description: Runs application distribution software and a Sybase DB	disk 0 - 30.01 GB disk 1 - 200.03 GB
Netware Servers			
Compaq ML530	1 GB	Processor speed 996 MHZ, CPUID: GenuineIntel Intel Pentium III Xeon processor Family 6, Model 8, Stepping 6 Feature flags 383FBFF L1 cache: 32K Bytes, L2 cache: 256K Bytes Current revision: 2 Description: Print Services	

Attachment A

HP Proliant DL380	2 GB				disk 0 - 260.01 GB
				Processor 0, Speed 3190 MHZ, CPUID: GenuineIntel Intel(R) Xeon(TM) CPU 3.20GHz Family 15, Model 2, Stepping 5 Feature flags 00004400:BFEBFBFF L1 cache: 20K Bytes, L2 cache: 512K Bytes, L3 cache: 2048K Bytes Processor Initial APIC ID: 6	
				Processor 1, Speed 3190 MHZ, CPUID: GenuineIntel Intel(R) Xeon(TM) CPU 3.20GHz Family 15, Model 2, Stepping 5 Feature flags 00004400:BFEBFBFF L1 cache: 20K Bytes, L2 cache: 512K Bytes, L3 cache: 2048K Bytes Processor Initial APIC ID: 7	
				Description: Runs Engineering applications, and file storage	
HP Proliant DL120 G5	4 GB			Processor speed 3000 MHZ, CPUID: GenuineIntel Intel Pentium III processor Family 6, Model 7, Stepping 6 Feature flags 0008E3FD:BFEBFBFF L1 cache: 64K Bytes Processor Initial APIC ID: 0 Current revision: 606	disk 0 - 20.01 GB disk 1 - 20.01 GB
				Description: GroupWise - web services	

Attachment A

HP Proliant DL320 G5p	4 GB	Processor 0, Speed 2326 MHZ, CPUID: GenuineIntel Intel P6 family processor Family 6, Model 15, Stepping 11 Feature flags 0000E3FD:BFEBFBFF L1 cache: 64K Bytes, L2 cache: 4096K Bytes Processor Initial APIC ID: 0 Current revision: B3	disk 0 - 20.01 GB disk 1 - 5.00 GB
		Processor 1, Speed 2326 MHZ, CPUID: GenuineIntel Intel P6 family processor Family 6, Model 15, Stepping 11 Feature flags 0000E3FD:BFEBFBFF L1 cache: 64K Bytes, L2 cache: 4096K Bytes Processor Initial APIC ID: 1 Current revision: B3	
HP Proliant DL360 G5	4 GB	Description: GroupWise - web services 2 - possible Dual Core	disk 0 - 25.01 GB disk 1 - 500.02 GB
		Description: GroupWise - web services	
HP Proliant DL360 G4	4 GB	Processor speed 3600 MHZ, CPUID: GenuineIntel Intel(R) Xeon(TM) CPU 3.60GHz Family 15, Model 4, Stepping 1 Feature flags 0000659D:BFEBFBFF L1 cache: 28K Bytes, L2 cache: 1024K Bytes Processor Initial APIC ID: 0	disk 0 - 295.84 GB
		GroupWise Server	
HP Proliant DL360 G4	4 GB	Processor speed 3600 MHZ, CPUID: GenuineIntel Intel(R) Xeon(TM) CPU 3.60GHz Family 15, Model 4, Stepping 1 Feature flags 0000659D:BFEBFBFF L1 cache: 28K Bytes, L2 cache: 1024K Bytes Processor Initial APIC ID: 0	disk 0 - 1786.24 GB
		Description: File sharing server	

Description:

Attachment A

HP Proliant DL360 G5	4 GB	Processor 0, Speed 3000 MHZ, CPUID: GenuineIntel Intel P6 family processor Family 6, Model 15, Stepping 6 Feature flags 0004E3BD:BFEBFBFF L1 cache: 64K Bytes, L2 cache: 4096K Bytes Processor Initial APIC ID: 0 Current revision: C6	disk 0 - 27.05 GB
		Processor 1, Speed 3000 MHZ, CPUID: GenuineIntel Intel P6 family processor Family 6, Model 15, Stepping 6 Feature flags 0004E3BD:BFEBFBFF L1 cache: 64K Bytes, L2 cache: 4096K Bytes Processor Initial APIC ID: 1 Current revision: C6	
		Description: Proxy Server	

Attachment A

HP Proliant DL380 G3 4 GB

Processor 0, Speed 2783 MHZ, CPUID: GenuineIntel
Intel(R) Xeon(TM) CPU 2.80GHz
Family 15, Model 2, Stepping 7
Feature flags 00004400:BFEBFBFF
L1 cache: 20K Bytes, L2 cache: 512K Bytes
Processor Initial APIC ID: 0

disk 0 - 200.81 GB

Processor 1, Speed 2783 MHZ, CPUID: GenuineIntel
Intel(R) Xeon(TM) CPU 2.80GHz
Family 15, Model 2, Stepping 7
Feature flags 00004400:BFEBFBFF
L1 cache: 20K Bytes, L2 cache: 512K Bytes
Processor Initial APIC ID: 6

Processor 2, Speed 2783 MHZ, CPUID: GenuineIntel
Intel(R) Xeon(TM) CPU 2.80GHz
Family 15, Model 2, Stepping 7
Feature flags 00004400:BFEBFBFF
L1 cache: 20K Bytes, L2 cache: 512K Bytes
Processor Initial APIC ID: 1

Processor 3, Speed 2783 MHZ, CPUID: GenuineIntel
Intel(R) Xeon(TM) CPU 2.80GHz
Family 15, Model 2, Stepping 7
Feature flags 00004400:BFEBFBFF
L1 cache: 20K Bytes, L2 cache: 512K Bytes
Processor Initial APIC ID: 7

Description: Old application distribution software server, and various other
needed services/applications

ONEsolution Public Administration Recommended Physical Hardware Specifications for v10.21

SQL Database Server



Supported Operating Systems:

- ☐ Microsoft Windows Server 2008 SP2 ☐
- Microsoft Windows Server 2008 R2

Supported Database Software¹:

- ☐ Microsoft SQL Server 2008 SP2 (Standard or Enterprise only) ☐
- Microsoft SQL Server 2008 R2 (Standard or Enterprise only)

Processors: Dual Quad-Core Intel[®] Xeon[®] at 2.0GHz or faster Memory (RAM): 12 GB or higher² Storage³: 200 GB for data plus 25% Free Space for I/O Performance (RAID10 recommended)

Application Server⁴



Supported Operating Systems:

- Microsoft Windows Server 2008 SP2
- Microsoft Windows Server 2008 R2

Processors: Single Quad-Core Intel[®] Xeon[®] at 2.0GHz or faster
Memory (RAM): 8 GB or higher
Storage: 50 GB for data plus 25% Free Space for I/O Performance (RAID5 recommended)

Job Server



Supported Operating Systems:

- Microsoft Windows Server 2008 SP2
- Microsoft Windows Server 2008 R2

Processors: Single Quad-Core Intel[®] Xeon[®] at 2.0GHz or faster Memory (RAM): 8 GB or higher Storage³: 50 GB for data plus 25% Free Space for I/O Performance (RAID5 recommended)

ONEsolution Public Administration Recommended Physical Hardware Specifications for v10.21

Cognos BI Reporting Server



Supported Operating Systems:

- Microsoft Windows Server 2003 SP2
- Microsoft Windows Server 2008 SP2
- Microsoft Windows Server 2008 R2

Processors: Single Quad-Core Intel® Xeon® at 2.0GHz or faster Memory (RAM): 8 GB or higher Storage³: 50 GB for data plus 25% Free Space for I/O Performance (RAID5 recommended)

GovNOW Web Server



Supported Operating Systems:

- ☐ Microsoft Windows Server 2003 SP2 (32-Bit Enterprise Edition Only) ☐
- Microsoft Windows Server 2008 SP2 (32-Bit Enterprise Edition Only)

Required Web Software⁵:

- ☐ IBM WebSphere Portal Express ☐
- IBM Tivoli Directory Server ☐ IBM
- HTTP Server ☐ BEA WebLogic

Processors: Single Quad-Core Intel® Xeon® at 2.0GHz or faster

Memory (RAM): 8 GB or higher

Storage³: 50 GB for data plus 25% Free Space for I/O Performance (RAID10 recommended)

Attachment B

Minimum System Requirements for Questys® CMx

Server Requirements:

- Pentium compatible, 2GHz or faster processor, dual core or better recommended
- Minimum 2GB; 4GB recommended
- 2GB hard disk space, plus proportional space for data repository
- Windows 2003 Server or later
- .NET Framework 3.5 SP1
- SQL Server 2005 or later
- Setup program automatically installs required software, except for the operating system, if not already present on the target machine
- Microsoft Office 2007 or later must be installed in order to pull text from Office documents
- Adobe Acrobat Reader 6.0 or later must be installed in order to pull text from Adobe documents

Setup prerequisites:

Before starting Questys CMx Server setup, ensure that the following prerequisites on the target machine are installed or configured:

- Message Queuing & Internet Information Services (IIS) 5.1 or higher must be installed and enabled prior to starting setup
- SQL Server instance named QUESTYSX, with full-text service installed and enabled. If the default instance is not found, setup will automatically install new SQL Server 2005 Express with Advanced Services SP2 instance named QUESTYSX.
- Ensure that the Distributed Transaction Coordinator service is configured for automatic startup and is started
- When ClickOnce feature is selected for installation, IIS service is required. It is used for hosting the Questys CMx Client click-once deployment.
- The user account running setup must have administrative privileges on the server.

Questys CMx Client Setup (ClickOnce) Requirements

Questys CMx Client runtime requires:

- Pentium compatible 1GHz or faster CPU
- 512MB RAM, 2GB recommended
- XGA (1024x768) graphics or better
- Windows XP SP2, Windows Vista, or Windows 7
- .NET Framework 3.0 SP1
- Setup program automatically installs the prerequisite software, except for the operating system, if not already present on the target machine. The user account running setup does not need administrative privileges on the client, as Click Once applications are installed per user.

Attachment C

List of applications currently on SAN

APACHE
BorderManager
DHCP
DVA
FTP
GroupWise WebAccess
GW Internet Agent
iManager
MTA
MySQL
NDPS Manager/Broker
Novell iPrint Services
OptiView Software
POA
QUESTYS Software
Symantec Backup Exec 12.5 planned update to BE2012
TOMCAT
Zenworks Configuration Management

Attachment D

Generic VDI Information

The City of Peoria has not had the opportunity to evaluate a VDI solution. It is not possible at this time to provide the exact specifications we seek for the environment. Acquiring the servers at this time will provide an environment with which to test, develop a pilot and ultimately implement VDI. Ideally we would like to come as close to 200 virtual desktops as possible in a finished product consisting of mostly production and some test virtual desktops.

These specifications have been determined in an attempt to provide a starting point and a model for comparison among vendors responding to the RFP. Using your experience and expertise as a VDI solution provider, tailor your server specifications using the table and notes below. If you chose to change the specifications, note the changes you made. Include any other relevant hypothetical information as necessary for evaluation purposes. If you chose a VDI provider other than VMware, provide means to make an apples to apples comparison with VMware.

This table is taken from the “Server and Storage Sizing Guide for Windows 7” from VMware, found at <http://www.vmware.com/files/pdf/view/Server-Storage-Sizing-Guide-Windows-7-TN.pdf>.

USER/WORKER TYPE	APPLICATIONS (Open simultaneously)	VM CONFIG	IOPS
Task-based (Light)	Limited (1-5 apps open at one time)	1 Virtual CPU 1GB Memory	3-7
Knowledge (Medium)	Standard office (5+ apps open at one time)	1 Virtual CPU 1GB Memory	8-16
Power User (Heavy)	Compute intensive (5+ apps open at one time)	1 Virtual CPU 2GB Memory	17-25
Power User (Heavy)	Compute intensive (5+ apps open at one time)	2 Virtual CPU 2+GB Memory	26+

Notes:

- Target the high end of the user classification of Knowledge Worker or Medium for all 200 virtual desktops.
- The virtual desktop Operating System will be Windows 7 32-bit.

Attachment E

List of applications currently on SAN

APACHE
BorderManager
DHCP
DVA
FTP
GroupWise WebAccess
GW Internet Agent
iManager
MTA
MySQL
NDPS Manager/Broker
Novell iPrint Services
OptiView Software
POA
QUESTYS Software
Symantec Backup Exec 12.5 planned update to BE2012
TOMCAT
Zenworks Configuration Management

Applications to be added to the new SAN

ONE Solution
Questys, upgrade

Attachment F

Clarification on Assessment Question

During the pre-proposal meeting, there was a request that the City expand on the assessment that was referenced in the bid. At that time, it was stated that an assessment was not done. That is not correct. There was a generic assessment completed, in January 2012. At that time, we had a vendor that we currently work with, come in and do a brief assessment on whether virtualization is something that the City should pursue. At that time we were told that there would be numerous benefits including;

1. Decrease in cost and increase efficiencies
2. Reduction in energy use for power and cooling
3. Reduction in server footprint
4. A flexible and fault tolerant infrastructure
5. Equal or greater performance than the current infrastructure

The City had discussed doing an in-depth assessment with base line measures etc. and decided against it. This is what he meant when he stated that there was not an assessment done.