



CITY COUNCIL AGENDA ITEM

December 21, 2010

To: John Szerlag, City Manager

From: John M. Lamerato, Assistant City Manager/Finance & Administration
Susan A. Leirstein, Purchasing Director
Gert Paraskevin, Information Technology Director
Gary G. Mayer, Chief of Police

Subject: Standard Purchasing Resolution 4: Cooperative Programs - Server Upgrade and SAN Expansion Project

Background

The Police and Fire Departments have six (6) servers that are at or near their end of life and need to be replaced. Some of these systems are critical to the operations of the Police and Fire departments; and in some cases, other areas of the city as well.

With the ongoing budget crisis, it's imperative to upgrade these systems in a way that will reduce operating and hardware purchase costs. By utilizing server virtualization, we can run up to twenty "virtual" servers on just two physical servers. This will reduce the need to buy server hardware and reduce costs to power and cool the server room. This solution is in line with IT standard practices.

Utilizing server virtualization requires us to attach the host server to our Storage Area Network (SAN) which has the maximum number of servers attached. This purchase will provide two new switches to allow additional servers and storage arrays to connect to the SAN along with redundancy to eliminate all single points of failure in the system. This will also provide a new shelf to hold the high speed drives for the new virtual servers. Another benefit of this project is the ability to connect the computer forensics lab to the SAN to provide additional storage and increased speed and productivity.

Recommendation

City management recommends that the City Council authorize the purchase of hardware and software from approved cooperative contracts at an estimated cost of \$72,200.00 per Attachment A. Recurring costs for this project are estimated at \$3,925.00 per year.

Fund Availability

Funding for this project is available in the Police Department Administration, Federal Drug Enforcement account, the Police Communications, and Computer Software accounts.



CITY COUNCIL AGENDA ITEM

Attachment A

Hardware

hp ProLiant Servers	\$ 20,000.00
SAN Hardware	\$ 35,000.00
Fiber Install	\$ 3,000.00

Software

VMWare Essentials Plus	\$ 3,400.00
Microsoft 2008 Data Center	\$ 6,800.00
<u>Microsoft SQL 2008</u>	<u>\$ 4,000.00</u>
Estimated Total Cost	\$ 72,200.00

Reoccurring Costs

VMware	\$ 750.00
Servers*	\$ 375.00
<u>SAN*</u>	<u>\$ 2800.00</u>
Estimated Total Per Year	\$ 3925.00

* First 3 years included in price



Material Manufacturer: **Systemax**

Zone: **1**

# of Cable Runs								TOTAL COST	
1-24		25-48		49-144		145-336		Labor	Material
Labor	Material	Labor	Material	Labor	Material	Labor	Material		

Price for Each Item based on Quantity								Total Price
1-24		25-48		49-72		72 & Up		per Unit
Labor	Material	Labor	Material	Labor	Material	Labor	Material	

Quantity Description HORIZONTAL WIRING

Quantity Description TERMINATING HARDWARE

1	Lightguide Interconnection Unit - Wall Mountable 12 Fibers	51.13	104.64	48.86	104.64	47.73	104.64	45.45	104.64	51.13	104.64
12	SC Ceramic Tipped 62.5 um		8.71		8.71		8.71		8.71		104.52
12	Terminate & Test 62.5 micron fiber strand on SC Connector	30.49		29.14		28.46		27.10		365.88	
1	Modular to 110 Category 5E Patch Panel - 24 Port	178.20	157.24	170.28	157.24	166.32	157.24	158.40	157.24		157.24
2	Troubleshoot - Price per Hour	54.45		52.03		50.82		48.40		108.90	

Quantity Description RISER / FIBER CABLE / FIBER SPLICING

375	12 Strands					Labor \$\$ / LF	1.10	Material \$\$/ LF	1.21	412.50	453.75
325	1" Carlon					Labor \$\$ / LF	1.49	Material \$\$/ LF	1.96	484.25	637.00

Quantity Description MISCELLANEOUS

Sub-Total - Labor / Material

\$1,422.66 \$1,457.15

Total \$ 2,879.81



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SALES QUOTATION

QUOTE NO.	ACCOUNT NO.	DATE
WFX8702	10219913	12/16/2010

RYAN WOLF
B 500 W BIG BEAVER RD
L
L CITY OF TROY POLICE
T TROY, MI 48084-5254
O

CITY OF TROY POLICE
S 500 W BIG BEAVER RD
H
I
P RYAN WOLF
T TROY, MI 48084-5285
O Contact: RYAN WOLF

Customer Phone # 2486197697

Customer P.O. # NEW SAN/VM QUOTE

ACCOUNT MANAGER	SHIPPING METHOD	TERMS	EXEMPTION CERTIFICATE
CHRIS LUNDMAN 866-668-9493	FEDEX Ground	MasterCard/Visa Go	GOVT-EXEMPT

QTY	ITEM NUMBER	DESCRIPTION	UNIT PRICE	EXTENDED PRICE
2	1722239	HP 8GB SIMPLE SAN CONNECTION KIT Mfg#: CPS-AK241A Contract: NATIONAL IPA TECH SOLUTIONS 083052	8630.00	17260.00
2	1400031	HP STORAGEWORKS 8/20Q 4-PORT UPG LTU Mfg#: CPD-T5463A Contract: NATIONAL IPA TECH SOLUTIONS 083052	1572.00	3144.00
1	2027129	HP SB P2000 G3 FC/ISCSI DC LFF ARRAY Mfg#: CPD-BK748SB Contract: NATIONAL IPA TECH SOLUTIONS 083052	13400.00	13400.00
1	1755388	VMWARE VSPHERE 4 ESS PLUS BND 3H Mfg#: VMM-VS4-ESSL-PL-BUN-C Contract: NATIONAL IPA TECH SOLUTIONS 083052	3200.00	3200.00
1	1753284	VMWARE VSPHERE ESS PLUS BND 1Y GSNS Mfg#: VMM-VS4-ESSLPLBUNGSSSC Contract: NATIONAL IPA TECH SOLUTIONS 083052	746.00	746.00
		----- Recommended items for HP SB P2000 G3 FC/ISCSI DC LFF ARRAY 2090265 HPE 3YR 24X7X4 MSA 2000 G3 HPE-UV394E 1999.00 2109792 HPE 3YR 24CTR DMR MSA2K G3 HPE-UV395E 2330.00		

TOTAL	Continued
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CDW Government
230 North Milwaukee Ave.
Vernon Hills, IL 60061
General Phone: 847-371-5000 Fax: 847-419-6200
Account Manager's Direct Fax: 312-752-3561

Please remit payment to:
CDW Government
75 Remittance Drive
Suite 1515
Chicago, IL 60675-1515

Total	37,750.00
FMV Lease Option	1,109.85/Month
Total	37,750.00
\$BO Lease Option	1,209.13/Month

Monthly payment based on 36 month lease. Other terms and options are available. Contact you Account Manager for details. Payment quoted subject to change. **

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Why finance?

- * Lower Upfront Costs. Get the products you need without impacting cash flow. Preserve your working capital and existing credit line.
- * Flexible Payment Terms. 100% financing with no money down, payment deferrals and payment schedules that match your company's business cycles.
- * Predictable, Low Monthly Payments. Pay over time. Lease payments are fixed and can be tailored to your budget levels or revenue streams.
- * Technology Refresh. Keep current technology with minimal financial impact or risk. Add-on or upgrade during the lease term. And choose to return or purchase the equipment at end of lease.
- * Bundle Costs. You can combine hardware, software, and services into a single transaction! Which means you can pay for your software licenses over time. We know your challenges and understand the need for flexibility.

General Terms and Conditions:

**This quote is not legally binding and is for discussion purposes only. The rates are estimate only and are based on a collection of industry data from numerous sources. All rates and financial quotes are subject to final review, approval, and documentation by our leasing partners. Payments above exclude all applicable taxes. Financing is subject to credit approval and review of final equipment and services configuration. Fair Market Value leases are structured with the assumption that the equipment has a residual value at the end of the lease term.

Public Sector home > Servers > Configurable - HP ProLiant DL Series > Configurable - HP ProLiant DL380 G7 > HP ProLiant DL380 G7 Server



Servers

HP ProLiant DL380 G7 Server

System price: \$9,633.18

From: \$4,464.00

- » Business lease cost /month \$29,911.02
- » Shipping and tax details

» **Product overview**

Current selection: MI - REMC (WSCA/NASPO)

Change selection:

Customize your configuration:

Product

HP ProLiant DL380 G7 High Performance Server

Processor

2 Six-Core Intel® Xeon® Processors X5650 (2.66GHz, 12M L3 Cache, 95 Watts, DDR3-1333, HT, Turbo 2/2/3/3)

Memory for 1st processor

HP 48GB PC3-10600R 6x8GB 2Rank Memory [500662-48G]

Memory for 2nd processor

HP 48GB PC3-10600R 6x8GB 2Rank Memory [500662-48G]

Advanced memory settings

No Item Selected

Microsoft Windows Operating Systems

No Item Selected

Microsoft Applications

No Item Selected

Novell Operating Systems (SuSE Linux)

No Item Selected

RedHat Linux Operating Systems

No Item Selected

VMware Operating Systems

No Item Selected

Citrix

No Item Selected

Storage controller

HP P410i/1GB Flash Backed Cache (SAS Array Controller)

HP Smart Array Advance Pack

No Item Selected

1st hard drive

HP 300GB 6G Hot Plug 3.5 SAS 15,000rpm Dual Port Hard Drive [516814-B21]

2nd hard drive

HP 300GB 6G Hot Plug 3.5 SAS 15,000rpm Dual Port Hard Drive [516814-B21]

3rd hard drive

No Item Selected

4th hard drive

No Item Selected

5th hard drive

No Item Selected

6th hard drive

No Item Selected

RAID setting

No Item Selected

Logical drive setting

No Item Selected

Network card

(2) Embedded HP NC382i Dual Port Multifunction Gigabit Server Adapters

PCI express card

HP NC364T PCI Express Quad Port Gigabit Server Adapter - Low Profile [435508-B21]

2nd PCI express card

No Item Selected

Riser card

HP PCI-E 3-slot Riser Card [500579-B21]

Power supply

2 HP 750W CS HE Hot-Plug Power Supplies

Power cord

No Item Selected

Flash media kit

No Item Selected

Security accessories

No Item Selected

HP ProLiant Foundation Pack

HP ProLiant Foundation Pack Single Release Factory Integrated Software [534516-B21] [Add \$0.73]

HP Insight Software - installed

- HP iLO Advanced 1 Server License with 1yr 24x7 Technical Support and Updates [512485-B21] [Add \$291.27]
- HP Insight Control Server Deployment including 1yr 24x7 Support Single Server License [452151-B21] [Add \$101.47]
- HP Insight Control including 1yr 24x7 Support ProLiant ML/DL/BL-bundle Single Server License [582765-B21] [Add \$327.77]
- HP Insight with Microsoft System Center Essentials 2010 including 1Yr 24x7 Technical Support and Updates [633576-B21] [Add \$180.00]
- HP Insight with Microsoft System Center Essentials 2010 - Including 3Yrs 24x7 Technical Support and Updates [633577-B21] [Add \$224.00]
- HP Insight with Microsoft System Center Essentials 2010 w/SQL Technologies- Including 1Yr 24x7 Technical Support and Updates [633578-B21] [Add \$1,106.00]
- HP Insight with Microsoft System Center Essentials 2010 w/SQL Technologies - Including 3Yrs 24x7 Technical Support and Updates [633579-B21] [Add \$1,377.00]
- HP Insight with Microsoft System Center Essentials 2010 Server Management License 1 pack- Including 1Yr 24x7 Technical Support and Updates [633592-B21] [Add \$180.00]
- HP Insight with Microsoft System Center Essentials 2010 Server Management License 1 pack- Including 3Yrs 24x7 Technical Support and Updates [633593-B21] [Add \$224.00]
- HP Insight with Microsoft System Center Essentials 2010 Server Management License 5 pack- Including 1Yr 24x7 Technical Support and Updates [633594-B21] [Add \$900.00]
- HP Insight with Microsoft System Center Essentials 2010 Server Management License 5 pack- Including 3Yrs 24x7 Technical Support and Updates [633595-B21] [Add \$1,121.00]
- HP Insight Control including 1yr 24x7 Support ProLiant ML/DL-bundle Electronic License [n/a 0 G7 insight sof] [Add \$0.00]

Server management

Integrated Lights Out 3 (iLO 3) Management

Warranty

HP Standard Limited Warranty - 3 Years Parts and on-site Labor, Next Business Day

Recommended supplies and accessories

Any hardware options below will not be factory installed

Service, support and upgrades

HP Care Pack, 3 Years, 4 Hours, 13x5, Hardware, ProLiant DL380 [U4544E]

Installation service

No Item Selected

Backup & recovery services

No Item Selected

Software services

No Item Selected

HP StorageWorks external tape backup options

No Item Selected

HP StorageWorks tape autoloaders

No Item Selected

HP StorageWorks disk enclosures (for additional storage capacity)

No Item Selected

HP Insight Software

HP Insight Control for Linux including 1yr 24x7 Support
ML/DL Bundle 1-Server License - Electronic [TC203AAE] [Add \$254.77]

Additional Microsoft Client Access Licenses

No Item Selected

HP Rack UPS

No Item Selected

HP Rack UPS ERM

No Item Selected

HP RackMount Keyboard Monitor

No Item Selected

External storage controller

No Item Selected

System price: \$9,633.18

From: \$4,464.00

- » Business lease cost /month\$29,911.02
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» [Product overview](#)

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Susan A Leirstein

From: Gert Paraskevin
Sent: Wednesday, December 22, 2010 9:05 AM
To: Susan A Leirstein
Subject: FW: CDW-G Order Confirmation

Here is the order confirmation from when we ordered these products last.

-----Original Message-----

From: cdwgsales@web.cdwg.com [mailto:cdwgsales@web.cdwg.com]
Sent: Thursday, May 13, 2010 11:51 AM
To: Gert Paraskevin
Subject: CDW-G Order Confirmation

5/13/2010 10:50:30 AM

This document is best viewed in a fixed font like Courier

Dear Gert Paraskevin:

Thank you for choosing CDW-G. We have received your online order. Please take a moment to review it for accuracy and completeness.

Order Number: 1B22CWL

PO Number: 2009-90000005
Customer Number: 6360514
Purchaser: Gert Paraskevin
Deliver To: Gert Paraskevin

Qty	Product	CDWG Part#	Unit Price	Ext. Price
2	Windows Server 2008 R2 DataCenter 1 Proc ..	1826389	\$1,620.00	\$3,240.00
336	Microsoft Windows Server Device CAL 2008 ..	1416974	\$19.65	\$6,602.40
1	Microsoft SQL Server 2008 Standard 1 Proc..	1541630	\$3,850.00	\$3,850.00

=====
Sub-Total \$13,692.40
Shipping \$0.00
Sales Tax \$0.00
Grand Total \$13,692.40

If you have any questions or changes to this order, please call a CDW-G account manager at 800.808.4239, e-mail us at cdwgsales@web.cdwg.com or simply reply to this message.

Just double-checking...

Occasionally a CDW-G account manager will call to confirm or clarify orders placed online. Your contact information is listed as follows:

Gert Paraskevin
(248) 524-3416

PERSONAL SERVICE ONLINE

Get the account information you need, when you need it.
Check order status and more with your CDWG@work extranet.
Learn more: <http://www.cdwg.com/personalservice>

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Sign up at: <http://www.cdwg.com/email>

CDW Government

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Vernon Hills, Illinois 60061
800.808.4239

PHONE HOURS:
M-F: 7am-7pm CT
Sat: 9am-5pm CT
Sun: Closed

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<http://www.cdwg.com/terms>