



CITY OF TORRINGTON

PURCHASING DEPARTMENT
140 Main Street, Room 206
Torrington, CT 06790

Pennie Zucco, Purchasing Agent
Phone: (860)-489-2225
Fax (860)-489-2547
Email: pennie_zucco@torringtonct.org

January 29, 2019

Mayor Elinor Carbone
Members of the City Council
Members of the Board of Public Safety

RE: RFP # VPD-023-010418 Virtualization Infrastructure Project

The City of Torrington received five (5) proposals pertaining to the Virtualization Infrastructure Project for the Torrington Police Department.

Accucom Consulting, Inc. Westport, CT	\$120,957.00/project
TBNG Consulting Milford, CT	\$84,548.69/project
SAI Systems, Int'l., Inc. Shelton, CT	\$87,956.00/project
JKS – Systems South Windsor, CT	\$128,997.76/project
All Covered/Konica/BS Ramsey, NJ	\$109,800.84/project

It is the recommendation of Gerry Crowley, IT Director, Capt. Wayne Newkirk and the Purchasing Agent that City Council authorize the Mayor to award the purchase of the Virtualization Infrastructure Project to TBNG Consulting, Milford, CT in the amount of \$84,548.69 and to have the Mayor act on the behalf of the City regarding the execution of the contract and it administration pending approval from Board of Public Safety.

Funding of this project will be through the PD Capital Fund 104E, Computer System Upgrade.

Thank you for your consideration in this matter.


Pennie Zucco
Purchasing Agent

cc: M. Maniago; W. Newkirk; G. Crowley

2018 FEB -1 AM 9: 16

RECEIVED FOR RECORD
TORRINGTON TOWN CLERK



City of Torrington

Bid Name Virtualization Infrastructure Project Bid Number VPD-023-010418
Date of Opening January 4, 2018 Time of Opening 11:00 AM

VENDOR	BID BOND	NON-COLLUSION	BID AMOUNT	ADDENDUM
Acetagen Consulting Inc 250 Post Rd. East Westport, CT 06880	\$6047.85 BANK CHECK	✓	\$120957.00	✓
JHS Systems 1965 John Fitch Blvd. South Windsor, CT 06074	✓	✓	\$128997.74	✓
All Covered Konica Minolta Business Solutions 2 Enterprise Dr. Ste 410 Shelton, CT 06484	✓	✓	\$109800.83	✓
SAT International 5 Research Drive Shelton, CT 06484	\$4070.00 BANK CHECK	✓	\$81366.00 6590.00 \$87956.00	✓
TONG Consulting 500 Boston Post Rd Middletown, CT 06450	\$4250.00 BANK CHECK	✓	\$84548.76	✓

Pennie Zucco

From: Gerry Crowley
Sent: Tuesday, January 23, 2018 10:26 AM
To: Pennie Zucco
Cc: Wayne Newkirk; Rudy Pullano
Subject: Virtualization RFP for Police Dept

Hi Pennie,

After reviewing the bid responses to the virtualization project RFP it is the recommendation of the IT Department that the bid be awarded to TBNG Consulting. Their bid response was rated the highest in all evaluation categories. They come highly recommended by their references and during the interview process demonstrated their understanding of the project's technical and performance goals.

Thank you,

Gerry Crowley

City of Torrington | Director of Information Technology
140 Main Street | Torrington, CT | 06790
Mobile: 860-601-0922 | Fax: 860-482-0407
Email: gerry_crowley@torringtonct.org

RF# WPD-023-010418
VIRTUAUZATION INFRASTRUCTURE PROJECT

VENDOR	Non-Collusion	Bid Bond	Unit cost per server (k3)	SAW storage unit price	Networking Price	Installation fee	TOTAL PROJECT
Accucom Consulting Inc. Westport, CT	yes	yes	\$12,578.00/ea. \$37,734.00	\$65,303.00	\$7,920.00	\$10,000.00	\$120,957.00
IBMG Consulting Millford, CT	yes	yes	\$10,025.57/ea. \$30,076.71	\$35,291.12	\$5,300.86	\$13,880.00	\$84,548.69
S&I Systems Int'l, Inc. Shelton, CT	yes	yes	\$6,457.00/ea. \$19,371.00	\$51,995.00	\$10,590.00	\$6,000.00	\$87,956.00
JKS - Systems South Windsor, CT	yes	yes	\$12,023.00/ea. \$36,069.00	\$84,134.89	\$6,793.87	\$2,000.00	\$128,997.76
All Covered/Konica/BS Ramsey, NJ	yes	yes	\$10,431.65/ea. \$31,294.95	\$53,155.77	\$6,645.12	\$18,705.00	\$109,800.84

2018 FEB -1 AM 9: 16

RECEIVED FOR RECORD
TOWN OF TORRINGTON



**CITY OF TORRINGTON
REQUEST FOR PROPOSAL**

RFP #VPD-023-010418 VIRTUALIZATION INFRASTRUCTURE PROJECT

Bid Opening: January 4, 2018 **Time:** 11:00 AM **Location:** City Hall, 140 Main St., Room 206, Torrington

Bid Bond or Certified Check required with bid: 5%

Performance Bond required if awarded bid: "See Instruction to bidders"

SUBMIT AN ORIGINAL AND 3 COPIES.

The City of Torrington reserves the right to accept or reject any or all bids or any portion thereof, to waive technicalities, and to award the contract as will best serve the public interest.

Omit State and Federal Taxes.

All prices must be F.O.B.: Destination (Torrington) unless otherwise requested.

Dated in Torrington: December 1, 2017 Purchasing Agent _____

Pennie Zucco

Item	Price
VIRTUALIZATION INFRASTRUCTURE PROJECT FOR TORRINGTON POLICE DEPARTMENT PER SPECIFICATIONS	****SEE ATTACHED PRICE SHEET****

The Purchasing Agent is authorized to offer City based bidders that exceed the lowest bid by up to 6%, the opportunity to match the lowest bid. A City based bidder within the 6% differential who agrees to accept the amount of the lowest bid will be awarded the bid. When multiple City based bidders agree to accept the amount of the low bid then the City based bidders will be invited to submit a new bid, not to exceed the low bid. The bid will then be awarded to the lowest responsive, responsible bidder.

Bid Submitted By: Evan Monroe
 Name of Company: TBNG Consulting Signature: [Signature]
 Address: 500 Boston Post Rd. Title: Account Executive
Milford, CT 06460

Phone: (203) 520-0907 Fax: (203) 783-0601 E-mail address: EMonroe@TBNGconsulting.com
 Date: 1-3-2018 Delivery Date: 30-Days post award
 Comments: _____



CITY OF TORRINGTON
Addendum # 1

THE CITY OF TORRINGTON HAS ISSUED ADDENDUM 1 REGARDING QUESTIONS/ANSWERS PERTAINING TO VIRTUALIZATION INFRASTRUCTURE PROJECT PER SPECIFICATIONS.

RFP# VPD-023-010418 VIRTUALIZATION INFRASTRUCTURE PROJECT

Date of bid opening: January 4, 2018 **Time:** 11:00 AM **Location:** City Hall, 140 Main St., Room 206, Torrington, CT

Submit signed addenda with bid.

The City of Torrington reserves the right to accept or reject any or all bids or any portion thereof, to waive technicalities, and to award the contract as will best serve the public interest.

Dated in Torrington: 12/21/17

Purchasing Agent _____

Pennie Zucco

Bid Submitted By: Evan Monroe

Name of Company TBNG Consulting

Address: 500 Boston Post Rd.
Milford, CT 06460

Signature [Signature]

Title Account Executive

Phone/Fax (203) 520-0907

Date 1-3-2018

QUESTIONS/ANSWERS 12/21/17

Q-1) Do you have sufficient space in their data racks for the hosts and storage?

A-1) No, an open 25U rack will be provided for staging new equipment.

Q-2) Do you have sufficient primary and backup power for the hosts and storage?

A-2) Yes

Q-3) Do you have adequate power cleaning/surge protection for the new hosts and storage?

A-3) Yes

Q-4) For the core switch, they are requesting 2 new modules to be added to the HP Procurve chassis but have only one slot open. To add two new modules, one module that is in the core will have to be removed. Do they already know which module will be removed to make room for one of the new modules? Who will perform the migration of the network connections from the module to be removed?

A-4) City of Torrington will determine/configure module consolidation to ensure (2) two slots are available for new modules.

Q-5) Will they use VLANs to segregate VMware/SAN traffic once the new hosts and storage are installed? Who will reconfigure the switch for the new VLANs? Do VLANs exist for the current VMware environment? When the current environment is taken down, do those VLANs need to be removed?

A-5) VLANs are in place and are used to segregate VMware/SAN traffic. Vendor will configure switch to accommodate connectivity for infrastructure. VLAN infrastructure will remain after migration.

Q-6) Is there a required amount of time for training city personnel?

- A-6) Nothing specific, expect training to be within generally accepted time frame for software/hardware provided.**
- Q-7) Who will dispose and decommission old equipment? Is the vendor responsible for that? Also – who will unrack old equipment?**
- A-7) The City will unrack, decommission and dispose of the old equipment**
- Q-8) Do they have active support and maintenance agreements for all current systems including network, server and storage equipment?**
- A-8) Maintenance agreements are expired/expiring on existing hardware. HP Procurve Networking has a lifetime warranty.**
- Q-9) Can you help me verify that the performance bond is only required if awarded the bid and if so whether the 10 days are business days or calendar days that the bond would have to be submitted after award**
- A-9) A 5% Bid Bond will be required with all submitted proposals. The Performance bond will be required of the awarded contractor. 10 calendar days.**
- Q-10) Also are you requiring that all companies that respond to the bid are VMware certified , HPE server certified as well as Nimble certified ?**
- A-10) Not required, but preferred and will factor into evaluation of RFP**
- Q-11) Is there a requirement for all responding to this RFP to be on a CT state contract?**
- A-11) No**
- Q-12) Is the Upgradation being made in the same Datacenter where current setup of VMware 5 is installed?**
- A-12) Yes**
- Q-13) If not, what is connectivity between New setup site & Old setup site?**
- A-13) N/A**
- Q-14) What is current Hypervisor (ESXi) Version?**
- A-14) VMware ESXi, 5.5.0 268190 HP OEM version**
- Q-15) Is there any Service Pack / Patch Installed?**
- A-15) No, HP 5.5 Update 2**
- Q-16) What is vCenter Version and patch level?**
- A-16) 5.5.0 Build 1945274**
- Q-17) Is the vCenter on Virtual Machine or Physical machine?**
- A-17) Virtual Machine**
- Q-18) If Physical machine, will that machine be upgraded too or same will be used for new implementation?**
- A-18) N/A**
- Q-19) Is any SSL deployed on current virtual infrastructure?**
- A-19) No**
- Q-20) Is vCenter integrated with Active Directory?**
- A-20) Yes**
- Q-21) Does vCenter have separate Active Directory setup or does it use central Active Directory?**
- A-21) Central Active Directory**

Q-22) Since venter 5 is not supported as Upgradable to 6.5 will that too be upgraded to minimum V5.1 Update 3 or direct VM guest migration to new setup will be there?

A-22) N/A

Q-23) Is vSphere Update Manager installed? Which version?

A-23) No

Q-24) Is Site Recovery manager (SRM) installed? Which version?

A-24) No

Q-25) How many total VM Guests are hosted on current setup?

A-25) 22

Q-26) What version of Veeam is being used?

A-26) 9.5.0.711

Q-27) Is Veeam also being upgraded?

A-27) No

Q-28) What is the Veeam Backup location?

A-28) HP StoreEasy 1430, Windows 2012 Storage Server

Q-29) What is current backup plan?

A-29) Daily Backup, Critical VMs

Q-30) Who will be consolidating current HP Procurve 5406zl (J8697A) modular switch?

A-30) City IT

Q-31) What RAID level is expected on new SAN?

A-31) Best Practice – See Nimble VMware Integration Guide

Q-32) How many and what size of Lun's in new SAN are required?

A-32) Best Practice – See Nimble VMware Integration Guide

Q-33) Is there space available in current Datacenter Racks for new Servers & SAN?

A-33) Yes, A temp rack will be provided for staging

Q-34) Is the assembly of new servers to be done at Torrington Police Department Datacenter?

A-34) Awarded contractor will be required to build on site

Q-35) Will the Media of new ESXi OS which is to be installed will be provided by Torrington Police Department Systems Admin?

A-35) Yes, HP OEM vSphere OS requested, not be upgraded during this migration

Q-36) Any resource pools configured?

A-36) No

Q-37) Any resource pools required in new setup?

A-37) No

Q-38) Will we, the vendor get full Admin. access to both current & new Setup?

A-38) The awarded contractor will be allowed full Admin. access with the New Setup: Current Setup: Vendor will not be required to administer/configure current setup.

Q-39) Will we, the vendor get full Remote access to both current & new Setup?

A-39) The awarded contractor will be allowed full Remote access with the New Setup: Current Setup: Vendor will not be required to administer/configure current setup.

Q-40) Is any server naming convention to be followed?

A-40) TPDESX###

Q-41) Will we be communicated all the required IP addresses & Network layout?

A-41) The awarded contractor will be given the required information

Q-42) Will the systems admin team at Torrington Police Department require any training on new setup?

A-42) Yes

Q-43) if yes, how many?

A-43) 4

Q-44) Are there any custom alarm configured?

A-44) No

Q-45) Are there any custom notification configured?

A-45) No

Q-46) Are there any custom plugins installed?

A-46) No

Q-47) Are there any Host configurations templates configured?

A-47) No

Q-48) Is there any future load or number of new virtual guest calculated?

A-48) Not at this time – Project goal is to support existing workload & provide resources for future growth.

Q-49) What is current CPU load?

A-49) N/A

Q-50) What is current Ram & VRAM load?

A-50) N/A

Q-51) What is current Network load?

A-51) N/A

Q-52) Are there any automation scripts to automate any tasks?

A-52) No

Q-53) Is there any power management policy configured on Cluster?

A-53) No

Q-54) Are all virtual guests compatible with Vmware 6.5?

A-54) N/A

Q-55) Who will be upgrading VMware tools on guests?

A-55) N/A

Q-56) Are there any non-standard customizations made to current setup?

A-56) No

Q-57) Any other considerations?

A-57) No

Q-58) Anything else to be disclosed?

A-58) No

Q-59) Is there any specific expectations or requirements for the new setup?

A-59) Yes, awarded vendor will work with City's application vendor regarding setup.

Q-60) Will we be provided with single point of contact?

A-60) The awarded contractor will be provided the single point of contact

Q-61) How many hard drives will be there inside each host server?

A-61) 0 - SD Card for OS boot (See RFP Spec)

Q-63) Will there be any hard drive inside the host servers?

A-63) 0 - SD Card for OS boot (See RFP Spec)

Q-64) If yes, what will be the size of hard drives?

A-64) N/A

Q-65) What RAID level is expected for the host server hard drives?

A-65) N/A - No local HDDs

Q-66) Can vendor assemble the servers and install VMware at their location?

A-66) No - Awarded contractor will be required to build on site

Q-67) If Yes, then can vendor fully configure servers and SAN at his location?

A-67) No - Awarded contractor will be required to build on site

Q-68) Are power plugs available to connect to all new host servers and SAN?

A-68) yes

Q-69) Please confirm the correct Part Number for the SAN Storage Array. Part # C1K-2T-21T-D?

A-69) C1K-2T-21T-D - Part # originally provided for RFP was incorrect

SAMPLE FORM
Bid # RFP #VPD-023-010418 VIRTUALIZATION INFRASTRUCTURE PROJECT

NON-COLLUSION AFFIDAVIT

STATE OF Connecticut COUNTY OF New Haven

I, Michael J. Grande, being first duly sworn, deposes and says that:

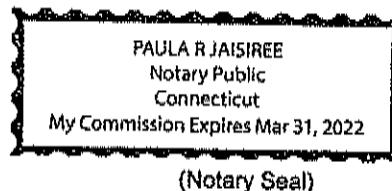
1. I am Member/Manager of The Business Network Group, LLC d/b/a TBNG Consulting the Bidder that has submitted the attached Bid for RFP #VPD-023-010418 VIRTUALIZATION INFRASTRUCTURE PROJECT
2. I am fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such bid;
3. Such Bid is genuine and is not a collusive or sham Bid;
4. Neither the said Bidder nor any of its officers, partners, owners, agents, representatives, employees or parties of interest, including this affiant, has in any way colluded, conspired, connived or agreed directly or indirectly with any other Bidder, firm or person to submit a collusive or sham Bid in connection with such Contract, for which the attached Bid has been submitted nor has it in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, firm or person to fix the price or prices in the attached Bid or of any other Bidder, or to fix any overhead, profit or cost element of the Bid price or the price of any Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the City of Torrington or any person interested in the proposed Contract; and
5. The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

Michael J. Grande
(Printed) _____
(Signed) *[Signature]*
(Title) Member/Manager

Subscribed and sworn to before this 2nd day of January, 2018.

Paula R. Jaisree
Notary Public Printed
Paula R. Jaisree
Notary Public Signature

My Commission Expires Mar 31, 2022

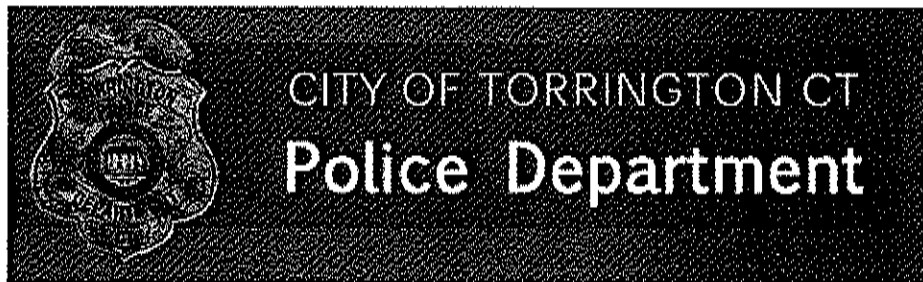


NOTE: Documents must be signed before and sealed by a Notary Public. Only documents bearing a notary seal will be accepted.



Virtualization Infrastructure Project

Presented to:



Submitted by:
Evan Monroe
Technology Solutions Team
1/3/2018

Prepared For:
City of Torrington
140 Main Street
Torrington, CT 06790
ATTN: Pennie Zucco

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ACCOUNT CONTACT INFO

Evan Monroe Account Manager | emonroe@tbngconsulting.com | (203) 874-9607 x130

Virtualization Infrastructure Project: Overview

This project encompasses several elements of network engineering, infrastructure replacement hardware with installation/integration on-site services. In addition to furnishing the required hardware for this project, it is TBNG's intent to meet or exceed the following goals and expectations:

- 1) Replace existing VMware hosts with SAN storage environment with new technology to ensure 24/7 availability of Torrington Police Department applications and data for a 3-year minimum
- 2) Implement a SAN environment that improves storage management operations, increase data throughput performance, integrates data back-up and recovery operations and allows capacity growth
- 3) Install and configure new VMware infrastructure that is ready to accept virtual machine migrations from the existing infrastructure
- 4) Replace integration with existing Datto Sirius Backup Appliance as primary backup and recovery solution for VMware guest servers WITH integration with existing VEEAM backup and Replication infrastructure as primary backup and recovery solution for VMware guest servers

This proposal represents a turn-key virtual cluster integration and install comprised of (3) HP Servers, (1) HPE Nimble SAN and (2) 8-port 10Gbe-T switching modules to serve as the primary iSCSI interface. Please note that with the goal of providing a best in breed solution that fits the needs to the City of Torrington, TBNG is proposing products all within the HPE product family to allow for integration and seamless communication among connected systems throughout the IT infrastructure.

Additionally, TBNG proposes the option to enter into an ongoing support contract for Managed Service 24x7 vendor monitoring services through PRTG online services. Our support teams would provide technical guidance and remote/onsite support for the proposed Virtualized platform, SAN infrastructure and additional IT infrastructure services. Details on the Managed Service Contract are available upon request

About Us

Established in 2005, The Business Network Group, now rebranded as TBNG Consulting, is a professional information technology consulting firm, specializing in network design, IT Support, business continuity, and security. Our firm's commitment is to provide your organization exceptional value through our engineering and industry experience.

Our team of certified and degreed engineers provide turn-key project and support services for our four core technology competencies:

- o **Network Infrastructure** – LAN|WAN, Servers, Virtualization, SAN, and Wireless Solutions.
- o **Perimeter Security** – Unified Threat Management, Firewalls, Anti-Virus, Logging, SEIM.
- o **Business Continuity** – Backup, Site Replication, Cloud Redundancy
- o **Managed IT Services** – Support Contracts, Project implementation, Staff Augmentation.

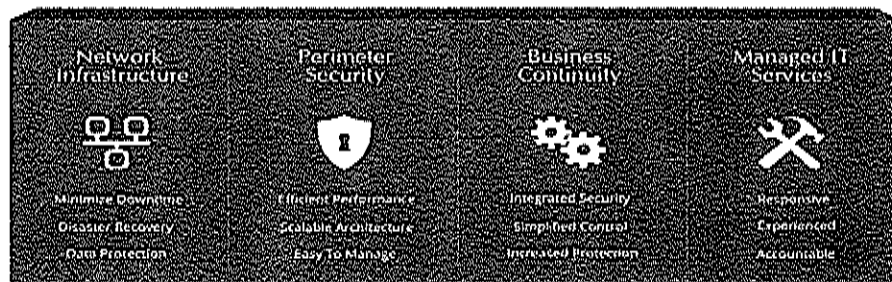
Our qualifications include:

- Leading technology channel delivery
- Deep engineering bench
- Local engineering support within Rhode Island and Connecticut region
- 12+ Years with Network Support & Implementation
- Dedicated GOV/ED Engineering Team

TBNG Consulting is pleased to present our friends at **The City of Torrington – Police Department** with upgrade proposal to your virtualization infrastructure

This proposal is based on TBNG Consulting's 13+ years of experience supporting CT & RI municipal and public safety networks. As such, TBNG is proud to serve our clients and keep them on the right technology upgrade path.

“ We design, implement and support highly scalable and secure network related technologies for finance, business, education, medical, non-profits, and government. Our solutions utilize best of breed technologies that bolster local, and wide area network performance speed and security. ”



Team Members

JEFFREY GRANDE *Director of Business Development/ Founder*

Mr. Grande holds a Bachelor of Arts from Boston College and a Master's of Science in Management Operations and Information Technology from the Worcester Polytechnic Institute. Jeffrey has obtained numerous certifications across TBNG Consulting's product spectrum. Jeffrey has a wide variety of industry experience including several years with AT&T (formerly SBC/SNET) as a Systems Engineer, designing data and voice network solutions on an enterprise scale. Prior to this experience, Jeffrey was a Corporate Systems Engineer with Nortel Networks in Chelmsford, Mass., and held the title of Assistant Vice President of Information Technology with a Hartford, CT based financial services company.



MICHAEL PAONE *Director of Engineering / Founder*

Mr. Paone attended Southern Connecticut State University where he founded the first computer lab for on campus residents. His current certifications include: Cisco Certified Network Associate (CCNA), Fortinet Certified Network & Security Professional (FCNSP), Microsoft Certified Systems Engineer (MSCE), and Microsoft Certified Database Administrator (MCDBA). Prior to co-founding TBNG Consulting, Michael was employed as a Senior Engineer for Telos Pharmaceuticals and as a Civilian Engineer for the United States Navy/Marine Corp. in San Diego, CA. He also was employed as a Remote Network Engineer for Greenfield Online in Wilton, CT and San Francisco, CA. Michael has 20 years of expertise and ensures that EBNG Consulting's network engineers and operations staff consistently deliver the highest quality technical services to our diverse client base.

MICHAEL GRANDE *Managing Director*

Mr. Grande holds a Bachelor's of Science in Finance & Management from Providence College. Michael previously served as the Chief Lending Officer for a CT based commercial bank and has extensive understanding and mastery of financial industry regulations and security procedures. He brings knowledge and expertise in the areas of corporate finance, financial reporting, cash management, interpretation of financial results, strategic planning and general business administration. Mr. Grande also serves on the board of directors for numerous educational and non-profit organizations.



LOUIS ARDOLINO *Director of Operations*

Lou's career in IT started in the Music Industry. As Director of Technology and Web for the music industry PR Firm, Nasty Little Man (Beastie Boys, Radiohead, Foo Fighters), Lou laid out the framework and IT blueprint for many small to mid-sized music industry companies during the late 90's through 2005. Seeing a need to cater to larger companies outside of the industry with a more robust infrastructure, Lou joined into a partnership to form Forrex Solutions, a metro New York based IT consulting firm where Lou later became Vice President of their Managed Services division. Lou brings hands-on knowledge of true end-user support and deep experience in serving client needs.



Pricing Proposals

After careful review and coordination with our HPE channel partners and TBNG engineer team, we have developed a highly-discounted cost table for all required components of this RFP. The pricing listed below not only reflects the hardware and services cost for this particular project, but a represents re-orderable bill of materials valid for a period of 12-months.

As such, if The City of Torrington wishes to purchase additional servers, networking equipment or SAN Storage nodes, the costs below can be used for any subsequent purchasing outside the scope of this RFP.

VMware Host Specifications

- (3) HPE Proliant DL360 GEN10 Server (1U) each configured as specified in the RFP and detailed below:

VMware Host Specification - Server Cost Table (per server cost)

QTY	Part #	Product Description	Price	EXT
1	875966-B21	HPE DL360 Gen10 TAA 8SFF CTO Svr	\$1,662.64	\$1,662.64
1	860653-L21	HPE DL360 Gen10 Xeon-S 4110 FIO Kit	\$668.90	\$668.90
1	860653-B21	HPE DL360 Gen10 Xeon-S 4110 Kit	\$698.85	\$698.85
6	815100-B21	HPE 32GB 2Rx4 PC4-2666V-R Smart Kit	\$694.27	\$4,165.62
1	764302-B21	HPE Flexbrc 10Gb 4P 536FLR-T Adptr	\$612.17	\$612.17
2	865408-B21	HPE 500W FS Plat Ht Plg LH Pwr Sply Kit	\$210.41	\$420.82
2	AF556A	HP 1.83m 10A C13-UL US Pwr Cord	\$6.81	\$13.63
1	BD505A	HPE iLO Adv 1-svr Lic 3yr Support	\$334.81	\$334.81
1	700139-B21	HPE 32GB MicroSD Flash Media Kit	\$112.36	\$112.36
1	872252-B21	HPE 1U Gen10 SFF 8B Rail Kit	\$81.03	\$81.03
1	H7J34A3 WAG	HPE DL360 Gen10 Support 3-year	\$1,254.75	\$1,254.75

10,025.58

Unit Price Per Server = \$10,025.59

30,076.74

Total Server Pricing = \$30,076.77

SAN Storage Array Specifications

- HPE Nimble CS1000 Adaptive Flash Array w/ 3-year warranty
- Nimble Part # CS1K-2T-21T-D
- Nimble CS1000 Dual Controller Storage array with:
 - o 21 x 1TB 7K SAS drives - 21TB RAW Capacity, 16.3TB Usable Capacity, 21TB Effective Capacity (assumes 1.25X to 1.3X data reduction via compression)
 - o 1440GB Read Cache for HEAD unit (3 x 480GB SSD's)
 - o Two 10GbaseT management ports (one per controller)
 - o Dual 10GbaseT host ports per controller, total of 4 x host ports
 - o 4U enclosure with rail kit
 - o 36 months 4 hour replacement parts delivery support with InfoSight

SAN Storage Array - Cost Table

QTY	Part #	Product Description	Price	EXT
1	C1K-2T-21T-D	C1K DUAL10GBASET 1PR 21TB 1440 GB	\$28,462.50	\$28,462.50
1	SLA-4HR	4HR PARTS DEL SW SUP & INFOSIGHT ADAPTIVE FLASH ARRAY 36-months	\$6,828.62	\$6,828.62

Unit Price of SAN (w/ 3-year support) = \$35,291.12

Networking Specifications

The City of Torrington wishes to consolidate the mainframe HP 5406 core switch to allow the addition of (2) HPE networking modules in order to support a total of (16) newly installed 10GbaseT ports for the new virtual infrastructure as detailed within this proposal. Hardware cost for the networking equipment detailed within the RFP can be found in the table below:

QTY	Part #	Product Description	Price	EXT
2	J9546A	HPE 8-port 10GBASE-T v2 zl Module	\$2,650.43	\$5,300.86

Price of Networking = \$5,300.86

Engineering Services Cost

After careful review, TBNG commits to complete this turn-key virtualization project as detailed herein and outlined in the RFP for a total project services cost of **\$13,880.00**.

QTY	Part #	Product Description	Price	EXT
1	Engineering Services	Turnkey installation of (3) HPE Servers, (1) Nimble SAN and (2) HPE Networking Modules. Includes project management, remote/on-site engineering services and post-cut documentation and end-user knowledge transfer	\$13,880.00	\$13,880.00

Virtualization Infrastructure Services Delivery Overview

Project Timeline

After careful consideration and evaluation of the RFP requirements, TBNG will commit to a project timeframe of 5-7 weeks to starting with the initial project kick-off with the City of Torrington dedicated IT personnel and ending with a formal project hand-off, knowledge transfer and project certificate completion review.

Throughout this process, TBNG engineers will provide on-site job training and knowledge transfer to the necessary staff for the City of Torrington specified within the RFP.

Task Details	Duration
<u>Award and Kick-off Phase</u>	<u>17 Days</u>
Bid Award	1 Day
Project Kick-off Meeting	1 Day
Equipment Ordered	14 Days
Equipment Delivered	1 Day
 <u>Configuration and Installation Phase</u>	 <u>10 days</u>
Initial Equipment Staging	2 Days
10GB Network card install and config.	1 Day
Rack and stack preconfigured SAN and Nodes	2 Days
Provision SAN and VMware Nodes	5 Days
 <u>Handoff and Close Out Phase</u>	 <u>7 Days</u>
Review scope of work with customer	4 Days
Failover Testing and System Validation	2 Days
Documentation Review and Handoff	1 Day

Please note that the dates specified above are not FORMAL commitments but rather a template representing TBNG's methodology and intended punch list of objectives with estimated duration for completion of each. These dates are subject to change based on hardware availability, TBNG resource availability and the City of Torrington's IT staff desired time-frame for cutover. Additionally, please note that 1-day does not represent a specific number of hours of on-site/remote labor

Technical Objectives

Accordingly, as part of this project, TBNG will complete the following objectives. Please note that if TBNG is awarded this contract, our engineering and project teams will craft a more detailed technical scope of work to be agreed upon prior to initial engagement.

OBJECTIVE 1: Replace existing VMware hosts with (3) new HPE DL360 servers to ensure 24/7 availability of Torrington Police Department applications and data for a 3-year minimum

OBJECTIVE 2: Furnish and install two (2) new HPE 8-port 10GBASE-T modules into existing HP 5406 core switch to provide 10GBE connectivity to the new Nimble SAN.

- Prior to onsite work, TBNG project engineer will need to consult with the City of Torrington POC for switch configuration for the following information:
 - i. VLAN assignment
 - ii. IP assignment
 - iii. Jumbo Frame enablement (if applicable on this existing switch model).
 - iv. Existing iSCSI network information; new assignment of iSCSI traffic for the new SAN.
 - v. Admin usernames, passwords, and relevant network information to enable connectivity to new SAN unit.
 - vi. Preferable static IP address and applicable network information for Nimble SAN assignment (in order to pre-configure device).

OBJECTIVE 3: Implement a SAN environment that improves storage management operations, increase data throughput performance, integrates data back-up and recovery operations and allows for capacity growth. This goal will be accomplished in (2) phases:

PHASE 1: Nimble Storage Area Network (Pre-Deployment):

- The TBNG project team will prepare the new Nimble CS-1000 SAN offsite at our staging facility or at client installation site (per Project Manager's direction):
 - Initial turn-up and POST of SAN unit.
 - Configure Nimble SAN with initial configuration (IP address, administrative access, etc.).
 - Register the Nimble SAN with Nimble InfoSight (1-877-364-6253 x2)
 - Configure volume provisioning according to Nimble best practice.
 - Configure SAN Network Interfaces into new iSCSI network based on new IP and VLAN schema
 - Test connectivity to existing network configuration.

PHASE 2: Nimble Storage Area Network (Onsite Deployment):

- This SAN unit will act as an additional target shared volume for the VMware platform and migration target for applicable existing virtual servers. Once the unit is ready for

deployment, the TBNG Project team will coordinate with the client for placement in their data center.

- Client will assist with preparations of this project as follows:
- Assistance with access to racking and power in server room.
- Naming conventions.
- Access to VMware vSphere console
- Guidance on which existing VMware Guest Servers will be ported to Nimble SAN.

OBJECTIVE 4: Install and configure new VMware infrastructure that is ready to accept virtual machine migrations from the existing infrastructure

OBJECTIVE 5: Replace Datto Sirius Backup Appliance as the primary backup and recovery solution for VMware guest servers **WITH** existing VEEAM backup and Replication infrastructure and provision VMware environment (hardware/software) to serve as primary backup and recovery solution for the SAN/Server/networking equipment specified in this RFP.

In addition to the basic goals and objectives set forth by the City of Torrington, TBNG will provide end-user knowledge transfer on the basic functionality of the newly installed Virtualization Environment for up to 3 designated staff members. In addition, those staff members are welcomed and urged to shadow our engineers to receive on-the-job training and service level installation details to best support the environment post production.

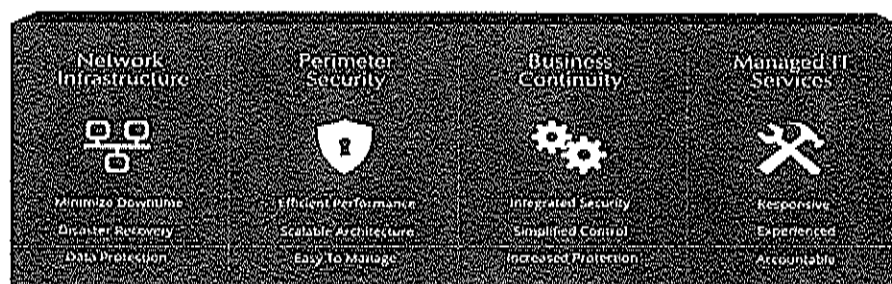


Exhibit A – Price Sheet**Bid Opening Date: January 4th, 2018, 11:00AM****ITEM: Virtualization Infrastructure Project as Specified**UNIT PRICE PER SERVER: \$10,025.59UNIT PRICE OF SAN: \$35,291.12PRICE OF NETWORKING: \$5,300.86PRICE OF INSTALLATION CONFIGURATION: \$13,880.00TOTAL PROJECT PRICE DOLLARS/CENTS: \$84,548.76TOTAL PROJECT PRICE IN WORDS: EIGHTY FOUR THOUSAND AND FIVE HUNDRED AND FORTY EIGHT DOLLARS AND SEVENTY SIX CENTSCOMPANY NAME: TBNG ConsultingADDRESS: 500 Boston Post rd. Milford, CT 06460DATE: January 3rd, 2018COMPANY REPRESENTATIVE: Evan C. MonroeTITLE: Account Executive**ADDITIONAL ORDERS**

The City would like the option to increase quantity of VMware Host Servers at the quoted price through additional orders. Please indicate the timeframe allowed for additional orders:

This pricing is valid for a period of 12-months for any additional purchases

Exhibit B – Acceptance of Terms of this Agreement

**City of Torrington
Request for Proposal
Virtualization Infrastructure Project
RFP# VPD-023-010418**

Acceptance of Terms of This Agreement

Company (Legal Registration)

The Business Networking Group (dba TBNG Consulting LLC)

Contact Person:

Evan Monroe

Address:

500 Boston Post rd.

City/State/Zip

Milford, CT 06460

Telephone: (203) 874-9607

Fax: (203) 783 0601

E-mail: emonroe@tbngconsulting.com

Authorized Signature: 

Title: MEMBER

Name Printed: Michael Paone

Date: 1/3/18

It is agreed upon by the above signed proposer that the signature and submission of this proposal represents the proposer's acceptance of all terms, conditions and requirements of the proposal specification, and, if awarded, the proposal will represent the agreement between the parties.

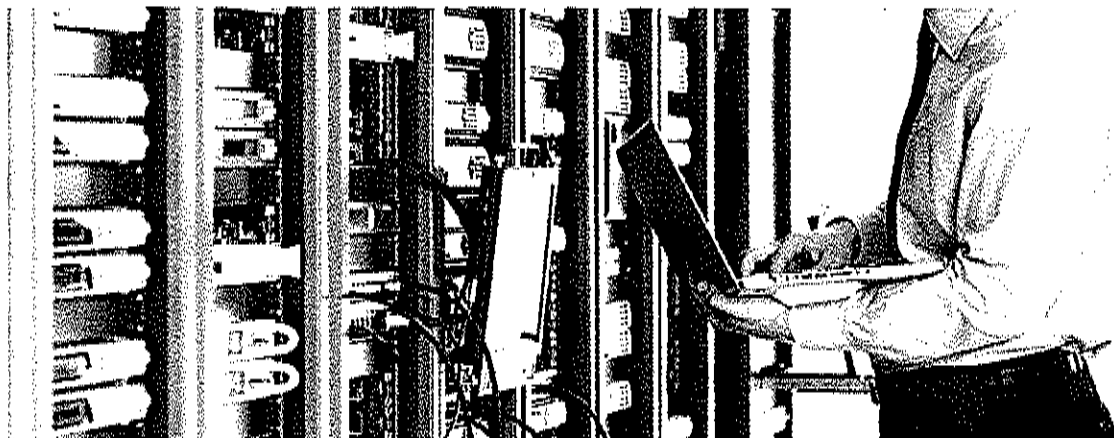
The proposer agrees that the cost of any work performed, materials furnish, services provided, or expense incurred, which are not specifically delineated in the proposal documents, but which are incidental to the scope, intent, and completion of this contract, shall be deemed to have been included in the prices for various items scheduled.

PERSONNEL & RESOURCE DISCUSSION

The TBNG support team is composed of the following expertise:

- Project/Systems Engineers – M.S./B.S./B.A. Computer/Network Science or equivalent work experience (minimum 6 years) and industry certifications
- Engineering Team – B.S. /B.A or equivalent work experience (minimum 3 years) and industry certifications
- Service Technicians - A.D./B.S. /B.A or equivalent work experience (minimum 1 years) and industry certifications
- Team certifications include: Dell Certified Server/Storage, VMware Certified Professionals (VCP), Cisco CCNA/CCNP, Brocade BCNA/BCNE, Fortinet FCSSP/Wireless, Nimble Storage, Barracuda Networks, Microsoft MCSA, MCSE

Ongoing professional development is a critical element of our team. Sales and technical team members are required to take vendor certification examinations as part of their professional development plan each year.



APPENDIX A – Certificate of Insurance

ACORD		CERTIFICATE OF LIABILITY INSURANCE		DATE (MM/DD/YYYY)		
				09/23/2016		
<p>THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.</p> <p>IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).</p>						
PRODUCER Amity Insurance & Financial Services, LLC 35 Old Tavern Rd Orange CT 06477		CONTACT NAME: Eve Wood PHONE (A/C, Mo, Ext): (203) 397-1660 FAX (A/C, Mo): (203) 399-1899 E-MAIL ADDRESS: Eve@amityabc.com				
INSURED The Business Network Group, LLC dba TBNG Consulting 500 Boston Post Road Milford CT 06460		INSURER A: Philadelphia Insurance Co 23850 INSURER B: Sentinel Insurance Company (The Hartford) 11000 INSURER C: The Hartford 10448 INSURER D: INSURER E: INSURER F:				
COVERAGES		CERTIFICATE NUMBER: Sept 15, 2016 - 2017		REVISION NUMBER:		
<p>THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.</p>						
INSTR. LTR.	TYPE OF INSURANCE	ADDITIONAL INSURED	POLICY NUMBER	POLICY START DATE (MM/DD/YYYY)	POLICY EXP. DATE (MM/DD/YYYY)	LIMITS
B	<input checked="" type="checkbox"/> GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> GENL AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO. EST. <input type="checkbox"/> LOC.	N	02 SBA AF3365	09/15/2016	09/15/2017	EACH OCCURRENCE \$1,000,000 DAMAGE TO RENTED PREMISES (EACH OCCURRENCE) \$1,000,000 AUTO EXCL. (ANY ONE PERSON) \$10,000 PERSONAL & ADV. INJURY \$1,000,000 GENERAL AGGREGATE \$2,000,000 PRODUCTS - COMPOUND AGG. \$2,000,000
B	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS	N	02 UEC ZJ2933	09/15/2016	09/15/2017	COMBINED SINGLE LIMIT (EA OCCUR) \$1,000,000 BODILY INJURY (Per Person) \$ BODILY INJURY (Per Accident) \$ PROPERTY DAMAGE (Per Occurrence) \$
B	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> EXCESS LIAB <input type="checkbox"/> RETENTION \$10,000	N	02 SBA AF3365 SB	09/15/2016	09/15/2017	EACH OCCURRENCE \$5,000,000 AGGREGATE \$5,000,000
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/OWNER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS BELOW	N/A	02 WEC CK7481	09/15/2016	09/15/2017	<input checked="" type="checkbox"/> NO STATUS <input checked="" type="checkbox"/> OTHER E.L. EACH ACCIDENT \$500,000 E.L. DISEASE - EA EMPLOYEE \$500,000 E.L. DISEASE - POLICY LIMIT \$500,000
A	Professional Liability	N	PHSD1180481	09/15/2016	09/15/2017	Policy Aggregate \$5,000,000
A	Cyber Liability	N	PHSD1180480	09/15/2016	09/15/2017	Policy Aggregate \$1,000,000
DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required) Computer Systems Integration Services						
CERTIFICATE HOLDER				CANCELLATION		
For Informational Purposes Only Individual Certificates may be requested thru the Producer listed above.				SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.		
				AUTHORIZED REPRESENTATIVE <i>Eve Wood</i> (EWS)		

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ACORD 25 (2010/05)

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APPENDIX B – TBNG Products and Services

TBNG can be your trusted advisor for various product sets and implementations. TBNG has strategic vendor relationships with the below as well as other key technology areas.

 PartnerDirect Preferred	 Premier Partner
 nimblestorage	Microsoft GOLD CERTIFIED Partner Security Solutions Network Solutions Networking Infrastructure Solutions Small Business Specialist Community
	
FORTINET PLATINUM PARTNER	
 Authorized Partner	
FORTINET MERU	VEEAM pro partner



📍 Corporate Offices
500 Boston Post Road, Milford, CT 06460
(203) 874-9607

📍 Rhode Island Offices
935 Jefferson Blvd., Ste. 1004, Warwick, RI 02888
(401) 709-5216

☎ Toll Free: (855) 512-4817

✉ info@tbngconsulting.com

🌐 www.tbngconsulting.com



Exhibit C – Statement of References

Client :

City of West Haven Police Services

355 Main Street, West Haven, CT

Network upgrades, onsite support for endpoint, virtualization platform, wireless solution, firewall and engineering Support. Sgt. Matthew Masek, mmasek@whpd.com Engagement includes: Managed Services and Projects.

Client :

City of Milford Police Services

430 Boston Post Road, Milford, CT

Municipal, Police & Fire , network upgrades VoIP support, wireless solution and engineering Support. LT. David Chila, Administrative Division, DChila@ci.milford.ct.us (203) 783-4701. Engagement includes: Managed Services and Projects.

Client :

Wallingford Police Department

135 North Main Street, Wallingford, CT

Vmware, Nimble SAN & network upgrades, onsite support for endpoint, virtualization platform, wireless solution and engineering Support. Sgt. Carmelo Ticino cticino@wallingfordpd.org (203) 294-2881 | cticino@wallingfordpd.org Engagement includes: Managed Services and Projects.

Client :

Hopkins School

986 Forest Road New Haven, CT

Campus, Private High School. Perimeter Security and layer-3 switching support. Project Deployment Services. DJ Plante, Directory of Information Technology, dplante@hopkins.edu (203) 397-1001.

Client :

Tower Laboratories

8 Industrial Park Road, Centerbrook, CT

Virtualization implementation project with Vmware, Dell Servers and Nimble SAN. Multi site - US locations. Gad Friedman, IT Manager, GadF@towerlabs.com (860) 767-4895. Engagement includes: Project Services and support.