

City Manager's Report  
Agenda Item Request  
Information Technology Department

To: Ed Lavallee, City Manager *EL*

From: Jeff Bolen, Information Systems Director *JB*

RE: Storage Area Network (SAN) Purchase

Date: April 18<sup>th</sup>, 2016

CITY COUNCIL MEETING DATE: May 10<sup>th</sup>, 2016

SUBJECT: Request the purchase of a storage area network, (SAN), in the amount not to exceed \$225,000.00.

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**Background:**

We are seeking the approval of the Mayor and Council for the purchase of a storage area network, (SAN), which was budgeted for this fiscal year, FY16, and is to be funded from one cent sales tax funds. The budgeted amount of \$225,000.00 includes hardware and professional services for installation and support.

This SAN will increase our network data storage capacity and enhance our disaster recovery capabilities and will also support future growth. The hardware, and professional services for installation and support will be purchased from CDWG utilizing the following cooperative contracts:

1. Florida NetApp NVP Computer Equipment (MNWNC-121 43211500-WSCA-1),  
Quotation GZGP493 – \$173,290.10
2. NJPA 100614#CDW Technology Catalog (100614#CDW),
  - a. Quotation GZCZ555 - \$15,813.02
  - b. Statement of work for professional services - \$29,120.00

**Requested Action:**

We therefore are requesting that City Council approve the purchase of the SAN from CDWG in an amount not to exceed \$225,000.00.

**City Attorney Review:** NA

**Risk Management Review:** NA

**Funds Availability:** Funds are coming from the one cent sales tax as approved for the FY16 budget year.



# City of Venice

## Information Technology Department

### MEMORANDUM

Date: May 2<sup>nd</sup>, 2016

To: Ed Lavalley, Venice City Manager

From: Jeff Bolen, Information Systems Director

RE: SAN Purchase

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The requested Storage Area Network, (SAN) is a needed piece of hardware that will support the City for years, safeguard City data, and provide for the future. The SAN is server and software independent. It is a place to store data, whether data from GIS, Laserfische, or even the new financial system, whatever system we adopt.

The new SAN will enhance our disaster recovery capabilities by having two cabinets talking to each other in real time. That means if one device was lost to a disaster, the other will be able to pick up where the first stopped.

Our continuity of operations will be enhanced by having a complete set of data in two separate places. One device will be located at our current EOC and the second one will be located at the wellfield data center. All connected via 10Gig fiber backbone.

Backup speeds will also be enhanced as well as the future ability of shipping data offsite for remote backups.

## Peter Boers

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**From:** Peter Boers  
**Sent:** Tuesday, May 03, 2016 1:20 PM  
**To:** Jeffrey Bolen; Edward Lavallee  
**Cc:** Judy Gamel  
**Subject:** RE: RE:"SAN purchase"  
**Attachments:** Form\_G-100614-Technology\_Solutions.pdf; florida-state-ordering-instructions-authorized-resellers-partners.pdf; wsca\_product\_service\_schedule.pdfp2.pdf

Ed/Jeff,

I concur with Glenn's statement.

I am attaching the evaluation matrix (Form G) to the NJPA solicitation. There were 12 responses with the promise of National buying power, so the pricing must have been pretty competitive.

The Net App contract (WSCA-NASPO) was awarded to multiple re-sellers. Though, I am thinking that the pricing would be the same for all of them as the Net App products were awarded.

For continuity and integration it would make sense to have one vendor supply all the equipment and the professional services.

Peter A. Boers, CPPB, CPPO, C.P.M.  
Finance- Procurement Department  
401 West Venice Avenue  
Venice, FL 34285  
P: 941-882-7422

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**From:** Jeffrey Bolen  
**Sent:** Tuesday, May 03, 2016 1:07 PM  
**To:** Edward Lavallee <ELavallee@Venicegov.com>  
**Cc:** Judy Gamel <JGamel@Venicegov.com>; Peter Boers <PBoers@Venicegov.com>  
**Subject:** RE:"SAN purchase"

I asked our vendor for some comparative prices, list, state contract etc. The Florida State contract is a "not to accede" contract, which means vendors can charge less. So the breakdown of our prices for the hardware is as follows;

Overall list price - \$264,594.98  
State Contract Price - \$238,754.94  
City of Venice Price - \$173,290.10

The balance of our request is professional services for installation and training on the new SAN.

Our cost for the hardware is \$91,304.88 below list price. It is also \$65,464.84 below the price in the Florida state contract. Our vendor was able to get a very aggressive pricing from the manufacturer because of the fiscal year end.

The State contract was signed on 12-1-14, which makes it a little over a year old, but will be in force for 4 years.

I also reached out to the County's CIO Glenn Zimmerman to ask how he procures equipment and he responded with the following;

We don't RFP, since it was already RFP'd for the state contract and our Procurement Code allows the use of state contracts. It saves us time and money when you look at all of the hardware purchases we do throughout the year.

***Glenn Zimmerman***

Chief Information Officer

Sarasota County

1660 Ringling Blvd.

Sarasota, FL 34236

941-861-2070



I will be at your disposal for questions.

Thanks

Jeff Bolen

Information Systems Director

City of Venice, FL

941-882-7425

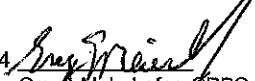


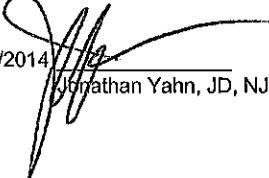
**Form G**  
**Technology Solutions with Related Equipment and Accessories**

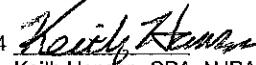
	Possible Points	ByteSpeed	CDW Government LLC	Firefly Computers LLC	Gridless Power	Ideal System Solutions	Info Snap	Polar Electro	PURVIS Systems	Q-Matic	SHI Int'l Corp	Synovia Solutions	Zones, Inc.
Conformance to Terms/ Conditions to Include Documentation	50	43.75	45.50	43.25	44.00	45.75	45.00	42.00	42.00	41.25	45.00	41.25	45.00
Pricing	400	325.00	341.25	318.75	300.00	350.00	282.50	300.00	287.50	300.00	332.50	252.50	322.50
Financial, Industry and Marketplace Successes	75	53.75	70.00	46.25	33.75	47.50	37.50	50.00	43.75	53.75	62.50	53.75	66.25
Bidder's Ability to Sell/ Service Contract Nationally	100	70.00	91.25	56.25	50.00	68.75	51.25	52.50	50.00	61.25	86.25	56.25	83.75
Bidder's Marketing Plan	50	40.00	45.00	36.25	25.00	42.50	36.25	37.50	38.75	36.25	45.00	33.75	43.25
Value Added Attributes	75	55.00	68.75	57.50	45.00	63.75	46.25	47.50	52.50	52.50	68.75	51.25	68.75
Warranty Coverages and Information	50	38.75	37.50	37.50	37.50	37.50	11.25	37.50	37.50	37.50	37.50	40.00	37.50
Selection and Variety of Products and Services Offered	200	123.75	177.50	125.00	101.25	152.50	105.00	103.75	106.25	111.25	172.50	106.25	162.50
<b>Total Points</b>	<b>1,000</b>	<b>750.00</b>	<b>876.75</b>	<b>720.75</b>	<b>636.50</b>	<b>808.25</b>	<b>615.00</b>	<b>670.75</b>	<b>658.25</b>	<b>693.75</b>	<b>850.00</b>	<b>635.00</b>	<b>829.50</b>

  
 11/6/2014  
 Ginger Lind, CPPB, NJPA

  
 11/6/2014  
 Tracy Plinske, NJPA

  
 11/6/2014  
 Gregg Meierhofer, CPPO, NJPA

  
 11/6/2014  
 Jonathan Yahn, JD, NJPA

  
 11/6/2014  
 Keith Hanson, CPA, NJPA

**NASPO ValuePoint NetApp Inc. Master Price Agreement Number MNWNC-121  
 Florida NASPO ValuePoint Contract Number 43211500-WSCA-15-ACS  
 Florida State Ordering Instructions-Authorized Resellers & Partners**

The following NetApp Partners are authorized to provide quotes, accept purchase orders, and accept payment from NASPO ValuePoint eligible end users located in the state of Florida.

<u>Name</u>	<u>WSCA Title</u>	<u>Phone</u>	<u>Email Address</u>
CDW-G Inc	Tony Sivore, Sales Manager SLG	Off (312) 705-3290 (866) 339-3535 FAX (312) 705-4990	<a href="mailto:tonysiv@cdwg.com">tonysiv@cdwg.com</a>
Champion Solutions Group	Mike Murphy	(561) 997-2900 extension 134 FAX (561) 997-4043	<a href="mailto:mmurphy@championsg.com">mmurphy@championsg.com</a>
Datalink Corporation	Matt Robinson	(952) 279-4854 FAX (952) 944-7869	<a href="mailto:mrobinson@datalink.com">mrobinson@datalink.com</a>
DLT Solutions	Susan Patrick-Britton, EDM Manager	Off (703) 773-8985 (800) 262-4358 FAX (866) 708-7033	<a href="mailto:susan.patrick@dlt.com">susan.patrick@dlt.com</a>
DynTek Services, Inc	Carlos Henley	(850) 219-7911 FAX (850) 219-7919	<a href="mailto:carlos.henley@dyntek.com">carlos.henley@dyntek.com</a>
Presidio Networked Solutions, Inc	Eric Franck	(813) 579-3429 FAX (813) 579-3430	<a href="mailto:efranck@presidio.com">efranck@presidio.com</a>
SHI International Corp	Nick Grappone	(732) 564-8189 FAX (888) 896- 8860	<a href="mailto:PS_Contracts@shi.com">PS_Contracts@shi.com</a>
United Data Technologies Inc	Tony Cossio	(305) 882-0435 (800) 882-9919 FAX (305) 882-0436	<a href="mailto:tcossio@udtonline.com">tcossio@udtonline.com</a>



## Datasheet

# Disk Shelves, Storage Media, and Cabling for NetApp FAS Systems

### Key Benefits

#### High Availability and Resiliency

Full redundancy, multipath connections, out-of-band management, and advanced analytics are standard.

#### Integrated Flash SSD Support

Choose full solid-state disk (SSD) configurations or mix SSD and HDD to combine the performance of flash with the capacity of hard disks.

#### Optical SAS Connectivity

Deliver high-performance, low-latency SAS connections across distances of up to 500m for enhanced flexibility and resilience.

#### Flexibility to Optimize Storage for a Variety of Needs

NetApp® FAS disk shelves and storage media give you flexibility to optimize for high performance or high capacity or to strike a balance.

#### Greater Simplicity

The same media and disk shelves work for all NetApp FAS systems, so you can upgrade controllers and keep shelves and media in place.

### The Challenge

#### Provide reliability and flexibility to support a broad set of application needs

Addressing the performance, capacity, and density needs of different applications can be a tricky balancing act, especially in shared virtual infrastructures in which the supported workloads can change quickly.

Storage administrators must constantly think ahead. Their infrastructure must be highly available, contain the right mix of HDD and SSD storage, and deliver the necessary data security for the changing requirements of modern IT deployments—including the cloud.

Acquiring and supporting separate storage systems for each workload can quickly exhaust your available budget, staff, and resources. When you add the ever-present need to optimize power, cooling, and floor space utilization, it's clear that storage hardware must be more flexible than ever.

### The Solution

#### Leading flexibility, performance, connectivity, and cross-platform leverage from NetApp

Designed for the most demanding environments, the NetApp FAS architecture offers a high degree of flexibility and choice in supported disk shelves and storage media. From high-capacity HDDs to high-performance SSDs to self-encrypting drives, NetApp delivers the right drive technology to meet your specific capacity, density, performance, and security needs.

Our selection of disk shelves helps you optimize for capacity, performance density, or versatility. You can attach different types of disk shelves to a single storage system to satisfy diverse requirements without having to deploy new storage systems. Your infrastructure is then more agile and more responsive to your business needs. For enhanced flexibility and resilience, optical SAS delivers high-performance, low-latency connectivity—between controllers and shelves—across extended data center distances.

NetApp is a proven leader in the use of flash technology to optimize storage cost and performance. NetApp Flash Pool™ intelligent caching technology combines HDD and SSD, caching “hot” data to SSDs in real time to accelerate performance. All-SSD shelves provide the highest performance for persistent storage.

The NetApp family of disk shelves delivers the enterprise-class resiliency and availability that you expect from the NetApp Data ONTAP® operating system.

Plus, the same drives and shelves work across all FAS platforms with nondisruptive controller upgrades for the utmost in flexibility. All shelves and media are supported in clustered Data ONTAP configurations.

### Highly Resilient and Available

To improve overall system availability, NetApp disk shelves are deployed by using multipath high availability with storage controller pairs. In addition:

- Full redundancy, including fans and power supplies, is standard in disk shelf designs.
- Alternate control path provides out-of-band management connections to each disk shelf.
- NetApp RAID DP® technology offers superior data protection and performance over traditional RAID implementations.
- Maintenance Center performs proactive health monitoring of drives, and, based on drive diagnostics, it distinguishes between transient events and real underlying issues.

### Optical SAS Connectivity

Designed to streamline deployment and give you more freedom in where you place storage, this NetApp solution is the first to deliver optical SAS connectivity. The easy-to-use, direct-connect solution can span distances of up to 500m for enhanced flexibility and resilience.

In busy data centers, finding free rack space where you need it can be a challenge. With optical SAS, you can add disk shelves to your existing NetApp storage with less concern for distance limitations. Now you can place expansion storage many aisles away or on another floor. Optical SAS also greatly simplifies the deployment of NetApp MetroCluster™ technology for separation distances within the 500m limit.

NetApp optical SAS cabling:

- Enables 4-lane 6Gb/s optical SAS connectivity
- Uses existing QSFP connectors and so requires no additional hardware
- Supports both multimode (OM4) and single-mode (OS1) optical fiber types
- Is compatible with an existing optical patch panel infrastructure

For details of available cabling options, see Table 3.

### Optimized Performance and Capacity

Many workloads are characterized by a large dataset with a small working set of active data that tends to change unpredictably. Previously, you had to choose between storage media that optimized for performance or that optimized for cost. Now it's possible to optimize for both.

With Flash Pool technology, NetApp supports the combination of HDDs and SSDs to dynamically cache random read and write operations, accelerating throughput while minimizing latency. Flash Pool takes advantage of the latency and throughput benefits of SSDs while maintaining the mass storage capacity of HDDs.

An existing aggregate can be converted into a Flash Pool configuration without requiring any data copying, downtime, or disruptions to data access.

### Storage Media to Meet a Variety of Needs

NetApp offers a variety of SSDs and HDDs to meet your needs, including both performance HDDs and high-capacity HDDs. You can deploy these drives alone or in hybrid configurations that combine HDD and flash.

**Performance HDDs.** Small form factor (SFF) 2.5-inch 10K RPM drives are the core of our performance HDD offerings. These drives offer great performance density and a variety of capacity options.

**High-capacity HDDs.** You can maximize storage density and minimize cost per gigabyte by using high-capacity disk drives, deployed as secondary storage or for production workloads.

If you are concerned about security, self-encrypting drives are available in SSD, performance, and high-capacity options.

NetApp Storage Encryption is the NetApp implementation of full-disk encryption using self-encrypting drives. All data on a drive is automatically encrypted, so you know that data at rest is protected. Key management is provided by an external appliance or software.

To identify the right media and disk shelf options for your applications, see Table 1.

### DS2246 disk shelf

The NetApp DS2246 is a performance-optimized disk shelf that packs 24 drives in only 2U of rack space using SFF drives. Compared with the 4U-high DS4246 disk shelf, the DS2246 doubles the storage density, increases performance density (IOPS per rack unit) by 60%, and reduces power consumption by 30% to 50%.

### DS4246 disk shelf

The NetApp DS4246 provides an excellent balance between performance and capacity. It is 4U high and supports 6Gb/s SAS connections. It can be configured with either 24 large form factor (LFF) high-capacity disk drives or a combination of SSDs and high-capacity disk drives to support Flash Pool configurations.

## DS4486 disk shelf

The capacity-optimized DS4486 holds 48 high-capacity disk drives. This disk shelf looks like the DS4246 from the front. However, it is slightly longer and uses a tandem disk carrier to enclose twice as many LFF disk drives in 4U of rack space.

In contrast to many capacity-optimized disk shelves, the DS4486 can be serviced from the front, and 10 DS4486 shelves in a 42U rack weigh less than 2,000 pounds (910kg). The rack can be supported by a raised floor in a traditional data center.

SELECTION CRITERIA	STORAGE MEDIA	DISK SHELF
<ul style="list-style-type: none"> <li>Highest IOPS for random I/O</li> <li>Lowest latency</li> </ul>	<ul style="list-style-type: none"> <li>SSDs</li> </ul>	<ul style="list-style-type: none"> <li>DS2246</li> </ul>
<ul style="list-style-type: none"> <li>Flash Pool support</li> </ul>	<ul style="list-style-type: none"> <li>SSD shelf</li> <li>Mixed shelf (SSDs + HDDs)</li> </ul>	<ul style="list-style-type: none"> <li>DS2246</li> <li>DS2246</li> <li>DS4246</li> </ul>
<ul style="list-style-type: none"> <li>HDD performance</li> </ul>	<ul style="list-style-type: none"> <li>Performance (10K RPM) HDDs</li> </ul>	<ul style="list-style-type: none"> <li>DS2246</li> </ul>
<ul style="list-style-type: none"> <li>Maximum capacity</li> <li>Lowest cost per gigabyte</li> <li>Maximum storage density</li> </ul>	<ul style="list-style-type: none"> <li>High-capacity (7.2K RPM) HDDs</li> </ul>	<ul style="list-style-type: none"> <li>DS4246</li> <li>DS4486</li> </ul>
<ul style="list-style-type: none"> <li>Data security</li> <li>NetApp Storage Encryption</li> </ul>	<ul style="list-style-type: none"> <li>Self-encrypting disk drives (AES-256)</li> </ul>	<ul style="list-style-type: none"> <li>DS2246</li> <li>DS4246</li> </ul>



SPECIFICATION	DS2246	DS4246	DS4486
Rack units	2U	4U	4U
Drives per shelf enclosure	24	24	48
<b>Supported Drive Types</b> (for specific drive information, see the <a href="#">Shelf and Media Technical Specifications</a> on NetApp.com)			
High-capacity HDDs		•	•
Performance HDDs	•		
Self-encrypting HDDs <sup>1</sup>	•	•	
SSDs	• (All-SSD and mixed) <sup>2</sup>	• (Mixed only) <sup>2</sup>	•
I/O modules	Dual 6Gb/s	Dual 6Gb/s	Dual 6Gb/s
Optical SAS support	•	•	•
Power supplies, cooling	Dual redundant, hot-pluggable, integrated power supply and fan assemblies	Dual redundant, hot-pluggable, integrated power supply and fan assemblies	Quadruple redundant, hot-pluggable, integrated power supply and fan assemblies
Drive form factor	2.5" Small form factor	3.5" Large form factor	3.5" Large form factor
Drive carrier	Single drive	Single drive	Tandem drives
Enclosure dimensions	Height: 3.4" (8.5cm) Width: 19" (48.0cm) Depth: 19.1" (48.4cm) Weight: 49lb (22.2kg)	Height: 7" (17.8cm) Width: 19" (48.3cm) Depth: 24" (61cm) Weight: 110lb 49.9kg)	Height: 7" (17.8cm) Width: 19" (48.3cm) Depth: 28" (71cm) Weight: 160lb (72.5kg)
MetroCluster <sup>3</sup> support	•	•	

Table 2) Comparison of NetApp disk shelves for FAS/V-Series storage systems.

1. Self-encrypting HDDs adhere to standards such as AES-256 and FIPS 140-2.

2. An all-SSD shelf contains SSDs only; a "mixed" shelf contains a combination of SSDs and HDDs for use by Flash Pool.

Flash Pool also works in "shelf-to-shelf" configurations in which SSDs from an all-SSD shelf are combined into an aggregate with HDDs from other shelves.

3. For details on MetroCluster, go to <http://www.netapp.com/us/media/ds-2893-metrocluster-solnbrief.pdf>.

CABLE TYPE	LENGTHS	CONNECTIVITY	CONNECTOR TYPE
Multimode active optical cable	1m, 2m, 3m, 5m, 15m, 30m, 50m	Controller to shelf and shelf to shelf	QSFP to QSFP
Multimode direct cable connect	Custom lengths up to 150m	Controller to shelf and shelf to shelf	QSFP transceivers with MPO cable
Multimode optical patch panel connect <sup>4</sup>	5m and 30m, max total cable distance 150m	Controller to shelf	QSFP transceivers with MPO cable to LC, SC, or MTRJ breakout
Single-mode optical patch panel connect <sup>4</sup>	5m and 30m, max total cable distance 500m	Controller to shelf	QSFP to LC, SC, or MTRJ breakout

Table 3) Optical SAS options.

4. MetroCluster configuration is required.

## About NetApp

Leading organizations worldwide count on NetApp for software, systems and services to manage and store their data. Customers value our teamwork, expertise and passion for helping them succeed now and into the future.

[www.netapp.com](http://www.netapp.com)

## Department of Management Services

[Florida Department of Management Services](#) > [Business Operations](#) > [State Purchasing](#) > [Vendor Information](#) > [State Contracts and Agreements](#) > [State Term Contracts](#) > [Commercial Off-The-Shelf \(COTS\) Software](#) > [Contractors](#) > Contractors - CDW Government LLC

### CDW Government LLC

<b>CBE Code</b>	<b>Florida Climate Friendly Preferred Products</b>	<b>Recycled Products</b>	<b>Utilizes Authorized Resellers</b>	<b>Coverage Area</b>
A - Non-Minority	No	No	No	Statewide

#### CDW-G CONTACT INFORMATION

##### Primary Contact Person

Name: John Johnsen

Title: Deputy Program Manager

Street Address: 230 N. Milwaukee

City, State, Zip: Vernon Hills, IL 60016

E-mail Address: [jjohnsen@cdw.com](mailto:jjohnsen@cdw.com)

Phone Number: (312) 705-0909

Fax Number: (312) 705-3709

##### Alternate Contact Person

Name: Jumana DiHu

Title: Program Manager

Street Address: 230 N. Milwaukee

City, State, Zip: Vernon Hills, IL 60016

E-mail Address: [jumdihu@cdwg.com](mailto:jumdihu@cdwg.com)

Phone Number: (312) 547-2495

Fax Number: (312) 705-9437

#### CDW-G ORDERING INFORMATION

Name: Rory Nolan

Title: Sales Manager

Street Address: 230 N. Milwaukee

City, State, Zip: Vernon Hills, IL 60016

E-mail Address: [rorynol@cdwg.com](mailto:rorynol@cdwg.com)

Phone Number: (312) 705-5542

Toll Free Number: (888) 923-9445

Ordering Fax Number: (312) 705-8632

Internet Address: <http://www.cdwg.com/>

**Federal Tax ID Number:** F364230110-029

**Remit to Address:**

Street Address: 75 Remittance Drive Suite 1515

City, State, Zip: Chicago, IL 60675

**CDW-G Licensing Questions**

Name: Gabe Arias

Title: Licensing Account Executive (Field)

Street Address: 120 S. Riverside Plaza

City, State, Zip: Chicago, IL 60606

E-mail Address: [gabe.aries@ms.cdw.com](mailto:gabe.aries@ms.cdw.com)

Phone Number: (312) 447-1988

Fax Number: (847) 968-0978

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# SALES QUOTATION

QUOTE NO.	ACCOUNT NO.	DATE
GZCZ555	0438649	4/11/2016

**BILL TO:**  
 CITY OF VENICE  
 401 W VENICE AVE

**SHIP TO:**  
 CITY OF VENICE  
 Attention To: ACCTS PAYABLE  
 401 W VENICE AVE

Accounts Payable  
 VENICE , FL 34285-2098

VENICE , FL 34285-2098  
 Contact: CORY BAKER 941.486.2626

Customer Phone #941.486.2626

Customer P.O. # UPS/TRANSCEIVERS  
 QUOTE

ACCOUNT MANAGER	SHIPPING METHOD	TERMS	EXEMPTION CERTIFICATE
MIKE ZORICA 866.339.3535	AIT - Deferred, 3-5 Days	Net 30 Days-Govt State/Local	858012621702C6

QTY	ITEM NO.	DESCRIPTION	UNIT PRICE	EXTENDED PRICE
1	567214	APC SYMMETRA RM 6KVA TO 6KVA N+1 208 Mfg#: SYH6K6RMT-TF3 Contract: NJPA 100614#CDW Technology Catalog 100614#CDW	6,756.02	6,756.02
2	513744	APC RM PDU 1U 20A 100/120V (8)5-20 Mfg#: AP7901 Contract: NJPA 100614#CDW Technology Catalog 100614#CDW	520.02	1,040.04
4	2852726	TRIPP 8M FIBER OM3 LC/LC AQUA 26FT Mfg#: N820-08M Contract: NJPA 100614#CDW Technology Catalog 100614#CDW	24.94	99.76
2	1677936	HP X132 10G SFP+ LC SR TRANSCEIVER Mfg#: J9150A Contract: NJPA 100614#CDW Technology Catalog 100614#CDW	686.00	1,372.00
2	2142060	HP X130 10G SFP+ LC SR TRANSCEIVER Mfg#: JD092B Contract: NJPA 100614#CDW Technology Catalog 100614#CDW	902.00	1,804.00
2	920138	APC NETSHELTER SX 42U ENCLOSURE RACK Mfg#: AR3100 Contract: NJPA 100614#CDW Technology Catalog 100614#CDW	1,037.45	2,074.90
2	1971972	APC 8X5 SCHEDULES ASSY SVC 1-5 RACKS Mfg#: WASSEM5X8-5R-PX-20 Contract: NJPA 100614#CDW Technology Catalog 100614#CDW	1,333.15	2,666.30
SUBTOTAL				15,813.02
FREIGHT				0.00
TAX				0.00

US Currency

**TOTAL** 15,813.02

CDW Government  
 230 North Milwaukee Ave.  
 Vernon Hills, IL 60061

Fax: 312.705.8218

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

This quote is subject to CDW's Terms and Conditions of Sales and Service Projects at <http://www.cdw.com/content/terms-conditions/product-sales.aspx>  
 For more information, contact a CDW account manager.



# SALES QUOTATION

QUOTE NO.	ACCOUNT NO.	DATE
GZGP493	0438649	4/13/2016

**BILL TO:**  
CITY OF VENICE  
401 W VENICE AVE

**SHIP TO:**  
CITY OF VENICE  
Attention To: ACCTS PAYABLE  
401 W VENICE AVE

Accounts Payable  
VENICE , FL 34285-2098

VENICE , FL 34285-2098  
Contact: CORY BAKER 941.486.2626

Customer Phone #941.486.2626

Customer P.O. # NETAPP X2 QUOTE

ACCOUNT MANAGER		SHIPPING METHOD	TERMS	EXEMPTION CERTIFICATE
MIKE ZORICA 866.339.3535		DROP SHIP-COMMON CARRIER	Net 30 Days-Govt State/Local	858012621702C6
QTY	ITEM NO.	DESCRIPTION	UNIT PRICE	EXTENDED PRICE
2	3011605	NETAPP SW-2 BASE CL NODE Mfg#: SW-2-CL-BASE Contract: Florida NetApp NVP Computer Equipment MNWNC-121 43211500-WSCA-1	0.00	0.00
2	3378965	NETAPP FAS2554 SYSTEM Mfg#: FAS2554-R6 Contract: MARKET	0.00	0.00
1600	3380751	NETAPP OS ENABLE PER.1TB ONTAP CAP Mfg#: OS-ONTAP-CAP1-1P-C Contract: Florida NetApp NVP Computer Equipment MNWNC-121 43211500-WSCA-1	11.19	17,904.00
64	3377071	Electronic distribution - NO MEDIA NETAPP OS ENABLE PER.1TB ONTAP ULTRA Mfg#: OS-ONTAP-CAP3-1P-C Contract: Florida NetApp NVP Computer Equipment MNWNC-121 43211500-WSCA-1	199.00	12,736.00
4	3367394	Electronic distribution - NO MEDIA NETAPP FAS2554 HI AVAIL SYSTEM Mfg#: FAS2554A-001-R6 Contract: Florida NetApp NVP Computer Equipment MNWNC-121 43211500-WSCA-1	3,358.00	13,432.00
2	3725273	NETAPP FAS2554 4X800GB 20X4TB HDD Mfg#: FAS2554-318-R6-C Contract: Florida NetApp NVP Computer Equipment MNWNC-121 43211500-WSCA-1	15,247.00	30,494.00
2	3367405	NETAPP DOCUMENTS 2554 -C Mfg#: DOC-2554-C Contract: MARKET	0.00	0.00
8	1407909	NETAPP -C R6 NORTH AMERICA POWER CAB Mfg#: X800E-R6-C Contract: MARKET	20.85	166.80
4	3337523	NETAPP CABLE DIRECT ATTACH CU SFP+ Mfg#: X6566B-05-R6 Contract: Florida NetApp NVP Computer Equipment MNWNC-121 43211500-WSCA-1	69.66	278.64
2	2772494	NETAPP 4 POST RACKMOUNT KIT Mfg#: X5529A-R6 Contract: Florida NetApp NVP Computer Equipment MNWNC-121 43211500-WSCA-1	53.84	107.68
4	3376178	NETAPP SW-2 PREM BNDL 2554A -C Mfg#: SW-2-2554A-PREMBNDL-C Contract: Florida NetApp NVP Computer Equipment MNWNC-121 43211500-WSCA-1	4,762.62	19,050.48
2	2772473	NETAPP SUPPORTEDGE PREM 4HR ONSITE Mfg#: CS-O2-NOINSTALL-4HR Contract: MARKET	9,388.28	18,776.56
2	3921355	NETAPP DSK SHLF 24X1.8TB 10K SAS 6G Mfg#: DS2246-24X1.8TB-1P-SK-R6 Contract: Florida NetApp NVP Computer Equipment MNWNC-121 43211500-WSCA-1	10,185.52	20,371.04
2	3666958	NETAPP FAS2554 EXP SHLF	0.00	0.00

864	3372876	Mfg#: FAS2554-EXP-R6 Contract: MARKET NETAPP OS ENABLE PER.1TB ONTAP PERF Mfg#: OS-ONTAP-CAP2-1P-P Contract: Florida NetApp NVP Computer Equipment MNWNC-121 43211500-WSCA-1 Electronic distribution - NO MEDIA	23.21	20,053.44
8	2307461	NETAPP CABLE,SAS CNTLR-SHELF/SHELF-S Mfg#: X6558-R6 Contract: Florida NetApp NVP Computer Equipment MNWNC-121 43211500-WSCA-1	125.63	1,005.04
4	2910604	NETAPP CABLE ETHERNET RJ45 CAT6 2M Mfg#: X6561-R6 Contract: Florida NetApp NVP Computer Equipment MNWNC-121 43211500-WSCA-1	7.54	30.16
2	1917579	NETAPP 5M CABLE ETHERNET RJ45 CAT6 Mfg#: X6562-R6-C Contract: Florida NetApp NVP Computer Equipment MNWNC-121 43211500-WSCA-1	0.01	0.02
2	2772494	NETAPP 4 POST RACKMOUNT KIT Mfg#: X5529A-R6 Contract: Florida NetApp NVP Computer Equipment MNWNC-121 43211500-WSCA-1	53.84	107.68
4	1531991	NETAPP POWER CABLE NORTH AMERICA,R6 Mfg#: X800E-R6 Contract: Florida NetApp NVP Computer Equipment MNWNC-121 43211500-WSCA-1	0.00	0.00
2	2772473	NETAPP SUPPORTEDGE PREM 4HR ONSITE Mfg#: CS-O2-NOINSTALL-4HR Contract: MARKET	9,388.28	18,776.56
60	1647952	NETAPP TRAINING UNITS 1 ZA Mfg#: ED-TU-1-ZA Contract: Florida NetApp NVP Computer Equipment MNWNC-121 43211500-WSCA-1 Electronic distribution - NO MEDIA	0.00	0.00
SUBTOTAL				173,290.10
FREIGHT				0.00
TAX				0.00

US Currency

**TOTAL** ↘ 173,290.10

CDW Government  
230 North Milwaukee Ave.  
Vernon Hills, IL 60061

Fax: 312.705.8218

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

# STATEMENT OF WORK

<b>Project Name:</b>	NetApp Installation and Data Migration (2 sites)	<b>Seller Representative:</b>
<b>Customer Name:</b>	City of Venice (FL)	Mike Zorica 866.339.3535 mikezor@cdwg.com
<b>CDW Affiliate:</b>	CDW Government LLC	
<b>SOW Created Date:</b>	April 14, 2016	<b>Solution Architect:</b>
<b>Version:</b>	2	Whitney Wilson, Jeff Kirkton

This statement of work ("Statement of Work" or "SOW") is made and entered into on the date signed by both parties (the "SOW Effective Date") by and between the undersigned, CDW Government LLC ("Provider", "Seller" and "we") and City of Venice (FL) ("Customer" and "you").

## PROJECT DESCRIPTION

### PROJECT SCOPE

Seller team will complete the following for Customer. Customer's staff should be involved in every step of this installation for familiarity and skills transfer. Seller's engineers will allow Customer's staff to perform as much of this work as time allows.

#### RACKING AND CABLING OF FAS2554 SINGLE-CHASSIS HA PAIR

- Tasks which will be completed:
  - Assist with the racking of storage controllers
  - Connect Ethernet cables run by Customer to the location the controller has been racked at
  - Connect Fibre cables run by Customer to the location the controller has been racked at
- Tasks which are out of scope:
  - Running Ethernet cables between Customers LAN switches and controller
  - Running Fibre cables between Customers SAN switches and controller
  - Labeling cables
  - Configuration of controllers
  - Configuration of LAN switches
  - Configuration of SAN switches
  - Training on using storage solution

#### RACKING AND CABLING OF 1 SHELF

- Tasks which will be completed:
  - Assist with the racking of disk shelf
  - Ensure storage controllers are cabled to disk shelf
  - Complete visual and system inspection to ensure shelf are properly cabled
- Tasks which are out of scope:
  - Configuration of controllers
  - Configuration of LAN switches
  - Configuration of SAN switches
  - Training on using storage solution

## CLUSTERED ONTAP - INITIAL CONFIGURATION AND SYSTEM VERIFICATION OF FAS2554

- Tasks which will be completed:
  - Run the initial setup routine for a Clustered ONTAP solution to complete base configuration
  - Complete additional SAN and LAN configuration not done by initial setup routine
  - Create one Storage Virtual Machine for each protocol licensed up to a maximum of 2 Storage Virtual Machines
  - Complete system testing to ensure storage is ready for production use
- Tasks which are out of scope:
  - Configuration of a 7-mode solution
  - Configuration of LAN switches
  - Configuration of SAN switches
  - Training on using storage solution

## STORAGE PROVISIONING HANDS ON TRAINING

- Tasks which will be completed:
  - Storage Provisioning overview training
  - Instructional session on storage provisioning GUI and CLI
  - Instructional session where Customer will create volumes in preparation for use with protocols
- Tasks which are out of scope:
  - Migration of production data

## CIFS IMPLEMENTATION HANDS ON TRAINING

- Tasks which will be completed:
  - CIFS overview training
  - Instructional session where Customer will configure and use CIFS shares
- Tasks which are out of scope:
  - Migration of production data

## CLUSTERED ONTAP - ONCOMMAND UNIFIED MANAGER IMPLEMENTATION HANDS ON TRAINING

- Tasks which will be completed:
  - Installation and configuration of OnCommand Unified Manager will be done by Seller engineer
  - OnCommand Unified Manager overview training
  - Instructional session where Customer will monitor events and prepare capacity reports on their storage solution using OnCommand Unified Manager.
- Tasks which are out of scope:
  - Creation of customized reporting or alerting
  - Reporting to additional 3<sup>rd</sup> party solution using SNMP

## SNAPMIRROR IMPLEMENTATION HANDS ON TRAINING

- Tasks which will be completed:
  - SnapMirror overview training
  - Instructional session where Customer will configure a SnapMirror relationship between two test volumes
- Tasks which are out of scope:
  - Configuration of SnapMirror relationship between production volumes.

## ESX: VIRTUAL STORAGE CONSOLE AND DATASTORE CONNECTIVITY TRAINING - SINGLE PROTOCOL

- Tasks which will be completed:

- Overview training on one storage protocol (NFS, iSCSI or FC/FCoE)
- Overview training on Virtual Storage Console (VSC)
- Installation and configuration of VSC and host configuration of non-production server
- Instructional session where Customer will configure and use datastores connected via single protocol
- If VSC is not used, training will cover manual datastore creation and connection
- Tasks which are out of scope:
  - Migration of production data

## **DR SITE**

### **RACKING AND CABLING OF FAS2554 SINGLE-CHASSIS HA PAIR**

- Tasks which will be completed:
  - Assist with the racking of storage controllers
  - Connect Ethernet cables run by Customer to the location the controller has been racked at
  - Connect Fibre cables run by Customer to the location the controller has been racked at
- Tasks which are out of scope:
  - Running Ethernet cables between Customers LAN switches and controller
  - Running Fibre cables between Customers SAN switches and controller
  - Labeling cables
  - Configuration of controllers
  - Configuration of LAN switches
  - Configuration of SAN switches
  - Training on using storage solution

### **RACKING AND CABLING OF 1 SHELF**

- Tasks which will be completed:
  - Assist with the racking of disk shelf
  - Ensure storage controllers are cabled to disk shelf
  - Complete visual and system inspection to ensure shelf are properly cabled
- Tasks which are out of scope:
  - Configuration of controllers
  - Configuration of LAN switches
  - Configuration of SAN switches
  - Training on using storage solution

### **CLUSTERED ONTAP - INITIAL CONFIGURATION AND SYSTEM VERIFICATION OF FAS2554**

- Tasks which will be completed:
  - Run the initial setup routine for a Clustered ONTAP solution to complete base configuration
  - Complete additional SAN and LAN configuration not done by initial setup routine
  - Create one Storage Virtual Machine for each protocol licensed up to a maximum of 2 Storage Virtual Machines
  - Complete system testing to ensure storage is ready for production use
- Tasks which are out of scope:
  - Configuration of a 7-mode solution
  - Configuration of LAN switches
  - Configuration of SAN switches
  - Training on using storage solution

## DATA MIGRATION PROJECT SCOPE

Customer is requesting assistance to migrate approximately 12TB of Data from an existing IBM X3650 storage solution (“Source”) to a new NetApp FAS2554 storage solution (“Target”). Seller will work with Customer to Plan, Design and Migrate Data on specific hosts from started sources(s) to specific target(s) according to the scope boundaries set forth below: including Data Gathering, Assessment, Planning, Design, Implementation and Migration data validation. Seller will use a Hyper-V tool or specific Storage Solution Native Windows tools as it primary tool(s) for migration of data during this project an may elect, at Sellers’s discretion, to employ the use of other appropriate methods as needed to complete the migration of data as defined in this SOW. This process will be based upon mutually agreed upon downtime requirements, planned in advance by both Seller and Customer.

### SOURCE ENVIRONMENT

- Qty. (1) IBM X3650
- Qty. (2) HP 2920
- Qty (6) Hyper-V 2012 Hosts
  - Approx. 12TBs, 40 VMs

### TARGET ENVIRONMENT

- Qty. (1) NetApp HA Pair FAS2554
- Qty. (2) HP 2920
- Qty (6) Hyper-V 2012 Hosts
  - Approx. 12TBs, 40 VMs

### DATA MIGRATION

Seller’s approach to this Data Migration project is addressed in the following phases:

- Discovery & Assessment
- Planning & Design
- Preparation
- Proof of Concept (POC)
- Pilot
- Data Migration
- Validation

### DISCOVERY AND ASSESSMENT PHASE

- Seller will perform a physical and logical inventory of Customer storage environment and supporting network hardware, and will gather information regarding the data type, size, and environment.
- Customer will complete a data assessment questionnaire provided by Seller.
- Seller will review the questionnaire and communicate with Customer as needed for additional or follow up information.
- Seller will run a data gathering and validation tool on Customer network (remote) in order to collect, analyze and validate Customer data is in line with project information.
- Seller will work with Customer if any needed outages are identified to ensure minimal impact to Customer business operations as well as to ensure correct collection of data.
- Seller will complete the analysis of existing host data collected and document any required changes to hardware/software/firmware and provide the list to Customer.

## PLANNING AND DESIGN PHASE

- Upon completion of the discovery and assessment phase, Seller will create a data migration strategy based on Customer specific needs. Seller and Customer will review the findings and recommendations.
- A migration plan will be submitted to Customer for approval before proceeding.
- Once the migration plan has been accepted then Seller will create a pilot and validation plan. The purpose of this plan is to test in a controlled pilot group the migration strategy.
- Validate the migration environment to ensure the appropriate assets will be migrated and meet Seller's interoperability requirements.
- Correlate storage environment information and plan for the migration solution.
- Create documentation of the proposed architecture in the Configuration Guide.
- Work with Customer to develop post migration cutover plan.
- Determine the engagement process and schedule.
- Determine Downtime windows.
- Determine Customer Change Control.

## PREPARATION PHASE

- Validate that the relevant equipment is on-site at the appropriate location with power and cable requirements met
- Confirm with Customer the installation, cabling, and connectivity to system cabinets are in accordance with the solution design
- Verification of the network, server, or storage configuration changes
- Installation and setup of the migration tool(s)
- Confirm Customer has completed a full backup of all data from source systems

## PROOF OF CONCEPT (POC) PHASE

- Execute and refine migration plan based on design
- Modify tool requirements as needed
- Validate source, target and migration methods and infrastructure
- Validate time estimates and modify and update migration project plan

## PILOT PHASE

- Development of the Data Migration Validation Plan with Customer
- Perform a test migration with data subset
- Review Pilot results upon successful completion
- Modify migration plan and conduct second pilot if required

## DATA MIGRATION PHASE

- Migration of the data in scope of this SOW
- Upon determination of migration plan and technique, specific implementation plans will be generated and executed.

## VALIDATION PHASE

- Review Data Validation plan with Customer
- Validate migrated data attributes
- Validate target system configuration
- Verify I/O is suspended and confirm with Customer that data removal from system is complete
- Perform post-migration clean up, including removal of any zoning, device mappings, port connections, and migration software or storage configuration settings that are no longer required in the environment
- Remove migration appliances as needed

- Provide appropriate Knowledge Transfer and target system Overview as applicable

## ENGAGEMENT PLANNING & MANAGEMENT

These tasks will ensure that project completion meets all requirements outlined in the scope of services. It includes the following activities:

- Internal Project Technical Planning
  - Solution and Technical Architecture Review and planning
  - Clearly define project scope, objectives, risks and approach
  - Develop a Work Breakdown Structure and Develop a Project Plan
  - Develop Communication and Escalation Plan
  - Identify project resources, roles, and responsibilities
  - Confirm site readiness and documentation
- External Project Meeting
  - Introduce key participants, stakeholders and project teams
  - Verify hardware delivery and specifications
  - Solution, requirements and logistics Review
  - Review and approve project plan
- Project Management
  - Task and resource scheduling and assignment
  - Administration, Financial and Team management
  - Escalation and communication management
  - Change control and management
  - Status meetings and reporting
  - Project Closeout

## CUSTOMER RESPONSIBILITIES

### NETAPP

Customer is responsible for the following:

1. Ensure you have read and completely understand the information in the "Site Readiness" document. This information in this document helps to ensure the environment is ready. Just a few of the things it gives you is the number of network drops and IPs you need, the number of rack units the systems require as well as the number of power supply connections.
2. Ensure you have completed the "Site Information for Storage Implementation" spreadsheet and returned it to Seller prior to the kick off meeting for the project. The information in this spreadsheet is used during the first day of the engagement to configure the systems. The entire project can be delayed if this spreadsheet is not completed prior to the first day of the engagement.
3. If this statement of work includes Seller providing racking services then ensure you have at least one (1) of our own employees selected to assist Seller engineer with installing the hardware into the racks. Seller will only provide one (1) engineer for racking services and it takes at least two (2) people to rack the hardware.
4. Provide a complete list of all systems that are connected or will be connected to the Storage Controllers. A new updated copy of this list must be provided for each new engagement. This information is critical for both implementations as well as upgrades. This list must include but is not limited to the following:
  - a. Server Type
  - b. Application running on server
  - c. Version and name of any Storage Solution software packages currently running on the system.
  - d. Server OS (exact version with service pack, release or technical level)

- e. Vendor and version of multipathing software currently running on the server
  - f. Make and model of the HBAs used in the servers.
  - g. Driver and firmware version of HBAs
  - h. If host is configured or will be configured to boot from SAN
5. Provide a complete list of all SAN switches which are or will be connected to the Storage Controllers. A new updated copy of this list must be provided for each new engagement. This information is critical for both implementations as well as upgrades. This list must include but is not limited to the following:
    - a. Switch vendor make and model
    - b. Switch OS version
    - c. Switch management software version
  6. Ensure a conference room or class room with overhead projector is available for Customer training sessions. The hands on training sessions will take up a majority of the time estimated to the project so it is a good idea to reserve the room for the entire day and every day after starting with the second day of the engagement.
  7. Provide test or non-production servers to be used for hands on training sessions. If Customer purchased the SnapManager application then a test or non-production server for each application will need to be provided. If test or non-production servers are not ready then Customer accepts hands on training will be completed only by lecture and/or presentations and not with a live demonstration on test or non-production servers. Seller will not be providing a test or non-production environment for training nor will they provide training on production systems.
  8. Ensure internal staff is present for all training sessions and is prepared to take notes. Your staff, not Seller staff, will be completing hands on training to familiarize themselves with the storage solution. These hands on training sessions will help to ensure your staff can take what they learn and repeat it later in your production environment. No amount of training will supplement the need to review documentation. Each training session will include a review of the NetApp documentation which has documented step by step procedures which can be followed for subsequent configuration by your staff.
  9. Ensure internal staff is present for any software installations or upgrades on production servers. The internal staff will be signing on and in control of the keyboard for the entire time software is being installed or upgraded on production servers. Seller engineers will develop the installation or upgrade plan that will be followed and Seller engineers will be present for the entire installation or upgrade, however, internal staff will be performing the upgrade.
  10. Ensure any production databases which will be migrated are backed up completely prior to the migration being started. If Customer can't or won't ensure a backup is done then Seller reserves the right to refuse to migrate the database without refund. The backup is a final precaution should any issues arise that corrupt data during the migration process. We do not expect the backup to be needed but this doesn't eliminate the need for it to be done.

## DATA MIGRATION

In addition to any other responsibilities described in this SOW that you may have, your obligations include (without limitation) those listed below.

1. Together with Seller, schedule the performance of the services.
2. Provide other full-time qualified, knowledgeable personnel who will perform your obligations under this SOW, make timely decisions necessary to move performance of the services forward, participate in this project to the extent reasonably requested by Seller and reasonably assist Seller with its performance of the services.
3. Your personnel will be available on a timely basis, and when reasonably requested by Seller, your personnel will provide input, review the services being performed and the items provided by Seller, answer questions, provide signoff, and allow Seller to gather and validate information, perform reviews and obtain other input.
4. When services are performed at your location, you will provide adequate, co-located workspace for the engagement personnel (both Sellers' personnel and your personnel) with appropriate system access. Seller recommends keeping these personnel separate from support teams and those performing daily operations.
5. Acquired all necessary hardware and software required to complete this project.
6. Provide Seller all appropriate media, licensing, and software keys.
7. Provide network connectivity, including cabling, Internet access and voice access for local and long distance calls.
8. Must perform a full back-up prior to Seller arriving to perform the service requested. Seller is neither liable nor responsible for the loss, back-up, or restore of any Customer data.
9. Grant or facilitate authorized Seller project delivery personnel the timely access to all related Customer equipment, systems, device and system consoles, (restricted access or otherwise secured location) that Seller would require in order to execute the Services set forth in this SOW.
10. Current LAN, WAN, Network Storage or related Systems documentation, including any relevant drawings, diagrams, layouts and schematics to Customer Environment either included or affected by the tasks set forth in this SOW, and as requested by Seller.
11. Inventory of Storage devices, physical and virtual to include SAN, NAS and Disk Arrays or as otherwise required by Seller.
12. All post-migration activities (i.e. reconfiguring replication and backups).

## **PROJECT ASSUMPTIONS**

1. Project management tasks will be performed remotely.

In addition to any other assumptions described in this SOW, Seller assumes the following:

2. The scope and objectives of this project will be jointly managed by you and Seller to better ensure completion of the project within the anticipated schedule.
3. If you require Seller to perform additional tasks that fall outside of this SOW additional charges may be incurred and will require Customer sign-off before additional tasks can be completed.
4. Services not specified in this SOW are considered out-of-scope and will be addressed with a separate SOW or Change Order.
5. Customer must provide valid licenses for all operating systems.
6. Customer will provide either a Project Manager or other consistent and knowledgeable resource familiar with Customer environment, processes and procedures in order to facilitate the timely execution of the tasks Seller is expected to complete as part of this SOW.
7. The scope and objectives of this project will be jointly managed by you and Seller to better ensure completion of the project within the anticipated schedule.
8. You and Seller will follow Seller's Project Management Methodology for this project. Seller's Project Management Methodology is as follows: Customer will work with Seller to define roles and responsibilities, develop project and test plans, identify risks, maintain change management procedures and ensure management of open issues.

9. If you require Seller to perform additional tasks that fall outside of this SOW additional charges may be incurred and will require Customer sign-off before additional tasks can be completed.
10. Existing network is in good working order.
11. All discovery Services are best effort and are dependent on the network being fully functional.
12. Customer has knowledge about current environment, storage area network, networking infrastructure.
13. Customer resources committed to the engagement will be made available throughout the engagement.
14. Customer has acquired all necessary hardware and software required to fulfill this project. Delays in hardware and software delivery may increase costs or change the project timeline.
15. Project management tasks will be performed remotely.
16. Seller will not be liable for any loss, corruption, or any other damage to data or software involved in this project.
17. The number of servers that are to be migrated during any single instance is limited to no more than XX, per session.
18. Customer and Seller agree that the total number of servers involved in the migration is XX.
19. Any change in the number of servers to be migrated will require a Project Change Request to the original SOW approved by both Seller and Customer and may require Seller to modify the number of servers migrated, per session accordingly.

## **ACCEPTANCE CRITERIA**

### **NETAPP**

The acceptance criteria for this engagement are as follows:

1. Storage solution installed and configured
2. Completion of hands on training
3. Delivery of storage solution procedural documentation

### **DATA MIGRATION**

The acceptance criteria for this engagement are as follows:

1. Assessment
2. Planning/Design
3. Completion of data migration.

## **OUT OF SCOPE**

### **NETAPP**

Tasks outside the statement of work include, but are not limited to:

1. Planning for Production data migration
2. Migration of production data to CIFS shares NFS exports
3. Migration of production data to FCP or iSCSI LUNs unless SnapManager was purchased, in which case migration is only included as described in the "Description of Services" section
4. Configuration of production SnapMirror relationships
5. Configuration of production SnapVault relationships
6. Installation and Configuration of Open Systems Snap Vault on production servers
7. Configuration of iSCSI LUNS on production servers
8. Configuration of FCP LUNS on production servers

## DATA MIGRATION

Tasks outside the statement of work include, but are not limited to:

1. Migration of any server not within the defined SOW
2. Any LUN consolidation.
3. Application verification – Customer is required to verify data/application integrity.

Services not specified in this SOW are considered out of scope and will be addressed with a separate SOW or Change Order.

## ITEM(S) PROVIDED TO CUSTOMER

The following will be provided to Customer by the completion of this project.

Table 1 – Item(s) Provided to Customer

Item	Description	Format
Procedural documentation	Storage solution procedural documentation	PDF
Communication Plan	Communication Plan for the project.	PDF
Data Questionnaire	Document completed by Customer that gives the Seller technical information needed to complete the Assessment. This is completed at the beginning of the Project.	Excel
Data Diagram	Visual depiction of the current data and storage environment.	PDF
Data Migration Plan	The plan that will document the necessary steps and procedures that will be performed by both parties (Seller and Customer) to ensure the successful migration of Customer's data.	PDF

## PROJECT SCHEDULING

Customer and Seller, who will jointly manage this project, will together develop timelines for an anticipated schedule (“Anticipated Schedule”) based on Seller’s project management methodology. Any dates, deadlines, timelines or schedules contained in the Anticipated Schedule, in this SOW or otherwise, are estimates only, and the Parties will not rely on them for purposes other than initial planning.

## TOTAL FEES

The total fees due and payable under this SOW (“Total Fees”) include both fees for Seller’s performance of work (“Services Fees”) and any other related costs and fees specified in the Expenses section (“Expenses”). Unless otherwise specified, taxes will be invoiced but are not included in any numbers or calculations provided herein.

Seller will invoice for the Total Fees.

## SERVICES FEES

Consultant Fees will be calculated on a TIME AND MATERIALS basis.

The invoiced amount of Consultant Fees will equal the rate applicable for a unit of a service or resource (“Unit Rate”) multiplied by the number of units being provided (“Billable Units”) for each unit type provided by Seller(see Table 2).

The Total Estimated Services Fees of \$29,120.00 is merely an *estimate* and does not represent a *fixed fee*. Neither the Estimated Consultant Hours of 137 nor the Estimated Services Fees are intended to limit the bounds of what may be requested or required for performance of the Services. Customer and Seller agree that during the performance of Services hereunder there will at all times be an agreed limitation on the amount of Consultant Fees that are approved for invoicing (“Approval Limit”). Upon execution of this SOW, the parties acknowledge and agree that there is an initial Approval Limit in the amount of \$35,896.00 (“Initial Approval Limit”) and that the Initial Approval Limit may be increased from time to time upon Customer’s written consent by a superseding Approval Limit (in each instance, an “Updated Approval Limit”). If the Services are not complete when the total Consultant Fees equal, as applicable, the Initial Approval Limit or the most recent Updated Approval Limit, and if Customer does not approve Seller’s request to increase the then-current Approval Limit, Seller will not invoice Customer for any Services Fees that exceed the applicable Approval Limit, and Seller will not be responsible for completion of the Services specified in the Project Summary.

Table 2 – Project Fees

Unit Type	Unit Rate	Billable Units	Subtotal
NetApp Senior Engineer – Per Hour	\$240.00	68	\$16,320.00
Data Migration Senior Engineer – Per Hour	\$175.00	40	\$7,000.00
Senior Project Manager – Per Hour	\$200.00	29	\$5,800.00
<b>Totals</b>		<b>137</b>	<b>\$29,120.00</b>

The rates presented in Table 2 apply to *scheduled* Services that are performed during Standard Business Hours (meaning 8:00 a.m. to 5:00 p.m. local time, Monday through Friday, excluding holidays). When Seller invoices for scheduled Services that are not performed during Standard Business Hours, Consultant Fees will be calculated at 150% of the Unit Rates. For any unscheduled (i.e., emergency) Services performed at any time of the day, Consultant Fees will be calculated at 200% of the Unit Rates.

Any non-Hourly Units will be measured in one (1) unit increments when Services are performed remotely or at any Customer-Designated Location(s) (as defined below).

Any Hourly Units will be measured in one (1) hour increments with a minimum of one (1) hour billed each day Services are performed remotely and four (4) hours billed each day Services are performed at any Customer-Designated Location(s). When Hourly Seller personnel must travel more than two (2) hours a day to work at any Customer-Designated Location(s), there will be a minimum of eight (8) hours billed for each day (less travel time that is invoiced pursuant to the “Seller Expenses” section below).

Upon notice, Seller may adjust the rates above, provided that the rates will remain fixed for at least six (6) months after the SOW Effective Date and then again for at least six (6) months after any subsequent adjustment.

The rates above only apply to Services specified in this SOW as it may be amended by one or more Change Order(s).

## EXPENSES

When Seller’s personnel are located more than 50 miles from Customer-Designated location, travel charges will apply. Seller will invoice Customer for the time Seller’s personnel spend traveling to and/or from Customer-Designated Location(s) (or otherwise, as necessary) at a rate of \$85.00/hour. Seller will make efforts to schedule appropriate personnel from Seller’s offices located nearest to Customer-Designated Location(s) in order to minimize such expenses. Seller’s ability to do so may depend on various factors (e.g., specialized project skills needed, personnel availability, and changes to, or challenges inherent in, the Anticipated Schedule).

Seller will invoice Customer for Seller's reasonable, direct costs incurred in performance of the Services. Direct expenses include, but may not be limited to: airfare, lodging, mileage, meals, shipping, lift rentals, photo copies, tolls and parking. Seller will charge actual costs for these expenses. Any projected expenses set forth in this SOW are estimates only.

Upon execution of this SOW, travel will be scheduled to occur no less than two (2) weeks after the date of Customer's request for travel. Should Customer request that travel be expedited, Customer will be billed for any additional travel and expense costs that apply.

## CUSTOMER-DESIGNATED LOCATIONS

Seller will provide Services benefiting the locations specified on the attached Exhibit ("**Customer-Designated Locations**").

## PROJECT-SPECIFIC TERMS

1. Customer is responsible for providing all physical and communications access, privileges, environmental conditions, properly functioning hardware and software, qualified personnel, project details, material information, decisions/directions, and personnel and stakeholder interviews that are reasonably necessary to assist and accommodate Seller's performance of the Services ("**Customer Components**").
2. Seller is not responsible for delays in performance directly caused by the unavailability of Customer Components and will have the right, with prior written notice and after a reasonable opportunity for Customer to correct the failure, to reassign Seller personnel to work unrelated to this SOW and the services hereunder or to invoice Customer for time Seller personnel are thereby idled if reassignment is not feasible.
3. Both parties will treat all employee personally identifiable information as confidential per the Agreement.
4. Customer will provide in advance and in writing, and Seller will follow, all applicable Customer safety and security rules and procedures.
5. Customer is responsible for security at all Customer-Designated Locations; Seller is not responsible for lost or stolen equipment.
6. This SOW can be terminated by either party without cause upon at least fourteen (14) days' advance written notice.

# SOW TERMS AND CONDITIONS

## CONTACT PERSON(S)

Each Party will appoint a person to act as that Party's point of contact ("Contact Person") as the time for performance nears and will communicate that person's name and information to the other Party's Contact Person.

Customer Contact Person is authorized to approve materials and Services provided by Seller, and Seller may rely on the decisions and approvals made by Customer Contact Person (except that Seller understands that Customer may require a different person to sign any Change Orders amending this SOW). Customer Contact Person will manage all communications with Seller, and when Services are performed at a Customer-Designated Location, Customer Contact Person will be present or available. The Parties' Contact Persons shall be authorized to approve changes in personnel and associated rates for Services under this SOW.

## PAYMENT TERMS

Customer will pay invoices containing amounts authorized by this SOW within thirty (30) days of Customer's receipt of the invoice. Any objections to an invoice must be communicated to Seller Contact Person within fifteen (15) days after receipt of the invoice.

## EXPIRATION AND TERMINATION

This SOW expires and will be of no force or effect unless it is signed by Customer and Seller within thirty (30) days from the SOW Created Date, except as otherwise agreed by Seller.

## CHANGE ORDERS

This SOW may be modified or amended only in a writing signed by both Customer and Seller, generally in the form provided by Seller ("Change Order").

In the event of a conflict between the terms and conditions set forth in a fully executed Change Order and those set forth in this SOW or a prior fully executed Change Order, the terms and conditions of the most recent fully executed Change Order shall prevail.

## MISCELLANEOUS

This SOW shall be governed by Seller's "Terms and Conditions of Product Sales and Service Projects", accessed via the "Terms & Conditions" link at [www.cdwg.com](http://www.cdwg.com) (the "Agreement"). If there is a conflict between this SOW and the Agreement, then the Agreement will control, except as expressly amended in this SOW by specific reference to the Agreement. References in the Agreement to a SOW or a Work Order apply to this SOW. This SOW and any Change Order may be signed in separate counterparts, each of which shall be deemed an original and all of which together will be deemed to be one original. Electronic signatures on this SOW or on any Change Order (or copies of signatures sent via electronic means) are the equivalent of handwritten signatures. This SOW is the proprietary and confidential information of Seller.

## SIGNATURES

In acknowledgement that the parties below have read and understood this Statement of Work and agree to be bound by it, each party has caused this Statement of Work to be signed and transferred by its respective authorized representative.

### CDW Government LLC

### City of Venice (FL)

By: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

#### Mailing Address:

#### Mailing Address:

230 N. Milwaukee Ave.

Street: \_\_\_\_\_

Vernon Hills, IL 60061

City/ST/ZIP: \_\_\_\_\_

Jeff Kula

#### Billing Contact (If different than above):

Street: \_\_\_\_\_

City/ST/ZIP: \_\_\_\_\_

## EXHIBIT A.

### CUSTOMER-DESIGNATED LOCATIONS

Seller will provide Services benefiting the following locations (“Customer-Designated Locations”).

Table 3 – Customer-Designated Locations

Location(s)	Service(s)		
City of Venice (Primary Site) 401 W. Venice Ave. Venice, FL 34285	<input type="checkbox"/> Assessment <input checked="" type="checkbox"/> Configuration <input checked="" type="checkbox"/> Design <input checked="" type="checkbox"/> Implementation	<input checked="" type="checkbox"/> Knowledge Transfer <input checked="" type="checkbox"/> Project Management <input type="checkbox"/> Reconfiguration <input type="checkbox"/> Reinstallation	<input type="checkbox"/> Staff Augmentation <input type="checkbox"/> Support <input type="checkbox"/> Training <input type="checkbox"/> Custom Work
City of Venice (DR Site) To Be Determined	<input type="checkbox"/> Assessment <input checked="" type="checkbox"/> Configuration <input checked="" type="checkbox"/> Design <input checked="" type="checkbox"/> Implementation	<input checked="" type="checkbox"/> Knowledge Transfer <input checked="" type="checkbox"/> Project Management <input type="checkbox"/> Reconfiguration <input type="checkbox"/> Reinstallation	<input type="checkbox"/> Staff Augmentation <input type="checkbox"/> Support <input type="checkbox"/> Training <input type="checkbox"/> Custom Work