



# City of Columbus Backup System Redesign and Deployment Project

Solicitation Number SA004593

DLT Quotation #: 4240660



**Presented by Team DLT**

September 27, 2012

**DLT**SOLUTIONS

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**Transmittal Letter and Offer**

October 1, 2012

DLT Solutions is pleased to offer this proposal for consulting services on a time and material basis to the City of Columbus, Department of Technology. As DLT has provided the city of Columbus NetBackup professional services in the past, DLT Solutions is the Prime Contractor for this engagement. DLT Consulting Services will be used to deliver Symantec NetBackup solutions specifically focused on backup system design, deployment, and documentation services.

This offer is valid for 180 days from October 4, 2012. Any changes or modifications after the original presentation date, resulting from requests by the City of Columbus will be subject to change control procedures, unless otherwise agreed to by Team DLT and the City of Columbus.

DLT's corporate information is as follows:

Company Taxpayer Identification Number (TIN)	54-1599882
CAGE code	0S0H9
DLT GSA Schedule Number	DLT GS-35F-4543G
Corporate Address	13861 Sunrise Valley Drive, Suite 400 Herndon, VA 20171

If you have any questions or comments of a technical nature, please contact Louis Dorsey at 703-773-9274, or by email at [Louis.dorsey@dlt.com](mailto:Louis.dorsey@dlt.com). For any contractual questions, please contact Natalie Tran at 703-708-9104, or by email at [Natalie.tran@dlt.com](mailto:Natalie.tran@dlt.com).



Gerald Hill  
Director of Sales, Enterprise Data Management

## **Company History and Facts**

Since its founding in 1991, DLT has tightly integrated itself with some of the most prominent IT software and hardware manufacturers in the world, including Symantec, Autodesk, Google, NetApp, Oracle, Quest Software, Red Hat, SolarWinds, and Amazon, among others. With its product portfolio, multiple procurement vehicles, and award-winning track record, DLT confidently supports public sector clients in the technology implementation required to achieve their agency missions.

DLT has 270 employees at our headquarters in Herndon, Virginia. In 2010, 60% of DLT was purchased by the TZP Group, a private equity investment fund ([www.tzp.com](http://www.tzp.com)), and became DLT Solutions, LLC. DLT is a financially sound company. In 2011, DLT's revenues exceeded \$780M. DLT holds more GSA SmartBuy, DoD ESI, and GSA Schedule based BPA contract vehicles than any other Value Added Reseller in the public sector. Under the GSA IT Schedule 70, DLT ranks number 1 in Term Software License Sales; ranks number 4 in Perpetual Software Sales; and ranks number 8 in Software Maintenance Sales. DLT is a proven provider of software, hardware, and services to public sector customers.

## **City of Columbus Contract Compliance**

DLT Solutions currently holds a valid compliance number: 541599882 and is active for two years, August 2, 2011 through August 2, 2013.

## **Primary business focus**

DLT Solutions is a Value Added Reseller (VAR) and Services Provider, delivering best of class technology solutions to federal, state, and municipal governments. Applicable NAIC codes include: 541519.

## **Qualifications**

As a past customer of DLT's Professional Services, DLT understands that managing data protection is vital to the success of City of Columbus. DLT's deep knowledge of the City of Columbus's backup environment will give us a vital step in the right direction, with less time needed for panning and orientation for the project. As a result, DLT Solutions has proposed services for Symantec Solutions to the City of Columbus (CoC) on this proposal for their Backup System Redesign and Deployment (project). This solution will not only protect and manage critical data, but also provides cost savings. Trust in our Enterprise Data Management (EDM) Team to customize solutions encompassing data storage, security and engineering support to achieve your agency's mission.

DLT's qualifications for this project include:

- Provided the NetBackup 6.5 Upgrade Project for City of Columbus in 2008
- Authorized Symantec Consultant (ASC) certified in Data Protection
- Symantec partner since 2001
- Largest Symantec partner in Federal sector
- Symantec Platinum Partner (highest partner designation)
- Authorized Partner in all 11 Symantec Solution and Segment Specializations
- Master Specialization consulting partner in Storage Management and Archive/e-Discovery Solutions Specializations (i.e. NetBackup Solutions)
- Symantec Enterprise Service Provider Licensing Program Partner (ExSP)
- Only Symantec Technical Support Partner Program (TSPP) partner in public sector
- Symantec Consulting Partner (SCP)
- 40 Symantec Technical Accreditations
- Active Participant on Symantec Advisory Councils

## **Organization size**

DLT has 270 employees at our headquarters in Herndon, Virginia. In business for over 20 years, DLT Solutions has experienced great success and stability. DLT Solutions clientele include DoD, Intel, Civilian, and State/local municipalities. DLT has done work for the City of Columbus in the past, both as a VAR and Services Provider. See the past performance section for more details.

## **Related experience**

DLT Solutions has tremendous experience in the delivery of NetBackup consulting services. With over 30 NetBackup solution engagements over the past three years, DLT continues to be a go to services provider for NetBackup projects. See our past performances for more details on recent successfully NetBackup projects.

## **Project staff information**

DLT Solutions is pleased to present CoC with a list of resumes of our NetBackup consultants. Please see Appendix A, DLT Resume Documentation, for more details.

## Quality and Feasibility

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### Proposed Services and Deliverables

DLT Solutions will provide a dedicated, certified engineer to the City of Columbus Backup Redesign Deployment Project on a time and material basis to complete the following tasks:

- Utilizes Symantec NetBackup 7.5 or later
- Utilizes existing or new purchased hardware and software outlined in the RFP
- Disk based backup targets, synchronized to a second data center
- Minimal use of tape media
- Follows the draft backup retention guidelines outlined in the original RFP

Deliverables will include but not be limited to the items outlined above. See the following Service Delivery plan for a complete breakdown of the project plan.

### Service Delivery Plan

DLT Solutions scope of work for this project includes the following Service Delivery Plan:

Phase 1: Planning and Redesign: DLT will initiate a planning discussion to prepare for the upgrade/redesign. The topics outlined below will be discussed during the meeting:

- Review roles and responsibilities
- Confirm primary Customer point of contact
- Confirm engagement logistics
- Review scope of services
- Review resource / schedule requirements
- Review Pre-Engagement Checklist (“PEC”) provided from Customer.
- Present overall recommendations, implementation project plan and refine as appropriate.

Phase 1 Milestones:

- Pre-deployment project plan created, finalized and provided to CoC for sign off.

Phase 2: NetBackup Installation and Configuration: For the purpose of this project, DLT Solutions will follow the outlined requirements of the CoC RFP. Along with Symantec NetBackup Best Practices, DLT will ensure the following criteria are met:

- Installation and configuration of NetBackup media servers
- Configuration of disk and tape hardware to work with the new system

- Migration of existing backup targets to the new system in a phased approach
- Installation and configuration of Symantec NetBackup OpsCenter reporting tool.
- Tuning of the environment for optimal backups, utilizing the NetBackup Tuning and Performance Guide as a baseline
- Create new backup domain utilizing most current release of Symantec NetBackup software.
- Build new master and media servers on hardware platforms recently acquired by the City of Columbus.
- Backup targets will be disk based, and replicated to disc at an off-site location.
- Tape backups will be minimally utilized as per guidance of the Official Data Backup System Retention Policies.
- Follows the draft backup retention guidelines
- All backup jobs will follow strict guidance of the policies outlined by the City Retention Officer.
- All disc targets will utilize deduplication.

## Phase 2 Milestones:

- Confirmation and customer sign off on the above criteria
- Existing NetBackup 6.5 tapes be usable to restore archived data if needed
- All data that is currently backed up must continue to be backed up through the upgrade process. No interruptions in service will be experienced.
- No interruption to production systems during normal business hours (6:00AM to 6:00PM M-F)
- Tuning of the environment for optimal backups, utilizing the NetBackup Tuning and Performance Guide as a baseline

Phase 3: Documentation and Reporting: DLT will provide CoC with a complete write up in the form of a trip report. This trip report will adhere to the template guidelines of the Department of Technology.

## Phase 3 Milestones:

- Review project activities.
- Handoff open support cases to Contractor Technical Support if applicable.
- Review the DLT trip report and answer any knowledge transfer questions.
- Provide CoC project close out documentation

## Best Practices Statement

DLT Solutions will always provide our customer with an overall best practices guideline as part of our consultation. For the NetBackup product, the below list of items will be covered as applicable for the CoC backup environment:

- Diagram of current environment, if available
- Master and Media servers
- Clients
- Licensing
- Catalog
- Storage
- Policies
- Job History
- Performance
- Network, as it pertains to the NetBackup environment
- Scheduling
- Backup window
- Recovery
- Retention policies
- Reporting
- Utilization of special Agents for databases and other systems
- Physical system components and virtual systems
- Disaster Recovery strategies
- Job failures and errors
- AIR - if applicable
- Vaulting - if applicable



## **Workload**

DLT is providing technical services for the full implementation of the proposed solution within the scope of city's request. DLT is responsible for analysis of existing environment, performing risk analysis, solution design, configuration, installation, validation, reporting, perform end to end high availability and disaster recovery testing, technical documentation and knowledge transfer to city's staff.

Below is an estimated calendar for completion of the backup redesign and deployment, which is subject to change:

<b><u>Event</u></b>	<b><u>Date/Time (if applicable)</u></b>
Award Issued:	Early-November, 2012
Resources assigned, project scheduled:	Early-November, 2012
Phase I: Planning:	2 -4 business days from start date
Phase II: Install/Configure:	10-15 business days from Phase I completion
Phase III: Document and Close Out:	2-4 business days from Phase II completion
Project Commencement:	On/Around December 15, 2012

## **Financial Responsibility**

### **DLT Solutions Financial Statement**

DLT Solutions is a financially sound company. DLT Solutions generated sales in excess of \$780MM in fiscal year 2011. As a privately held company, DLT's financial statements are confidential. Upon award and execution of a Non-Disclosure Agreement financial documents will be provided to the City of Columbus for review, if required.

Our financial systems are reviewed annually for adequate internal controls since we have hundreds of prime and subcontractor awards. We have stringent accounting and financial controls in place to track hours, expenses and costs in accordance with applicable T&M procurement regulations. In addition, over the years, DLT Solutions has gone through some pre-award government audits and has been deemed to have adequate billing and accounting systems for T&M awards.

## **DLT Solutions Past Performance Sample Symantec NetBackup Projects**

### **City of Columbus**

- See Appendix B, DLT Solutions Trip Report from the NBU project at CoC for the 6.5 Upgrade that occurred in 2008

### **Texas School District (USID)**

- Install NBU 7.5
- Windows Master and Media Servers
- Configure disk and tape storage
- Configure deduplication

### **Navy Cyber Defense Operations Command (NCDOC)**

- Upgrade NBU from 6.x to 7.x
- Solaris Master server, Windows Server 2008 Media servers
- Configure NetApp storage
- Configure Oracle StorageTek Tape Library
- Configure deduplication
- Configure Bare Metal Restore
- Configure VMware backups
- Configure Exchange GRT backups

### **United States Agency for International Development (USAID)**

- Upgrade NBU from 6.x to 7.x
- Windows Master and Media server
- Configure Tape Library
- Configure VMware backups
- Configure Exchange GRT backups

### **State Department**

- Upgrade NBU from 6.x to 7.x
- Configure replication of NBU to secondary site
- Configure disk storage
- Configure Tape Library
- Configure deduplication
- Configure Exchange backups

## **Commonwealth of Virginia County**

- Upgrade NBU from 6.x to 7.x
- Configure disk storage
- Configure Tape Library
- Configure deduplication
- Configure SQL backup and restore

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**Cost and Payment Terms**

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**Assumptions and Obligations**

Customer acknowledges that the timely provision of and access to office accommodations, facilities, equipment, assistance, cooperation, complete and accurate information and data from Customer's officers, agents, and employees, and suitably configured computer products (collectively, "cooperation") are essential to the performance of any services as set forth in this exhibit. DLT will not be responsible for any deficiency in performing services if such deficiency results from Customer's failure to provide full cooperation.

**Obligations**

- Customer is responsible for the purchase of all software and hardware, including, but not limited to network infrastructure, storage and servers.
- Any changes in scope, effort and/or duration of the engagement will be addressed using standard change control processes.
- Customer will provide DLT with full access to the relevant System functional, technical and business resources with adequate skills and knowledge to support the performance of services.
- Customer will assist with all of the activities outlined in the proposal.
- Customer will provide and maintain the needed hardware and network environments.
- Customer is responsible for ensuring that chosen hardware and OS platform have been patched to recommended levels for software installation.
- Customer will designate an executive sponsor, who will be a Customer to review issues and make policy decisions. The Sponsor is responsible for the project from Customer's perspective.

**Assumptions**

DLT Solutions will invoice Customer for actual time spent performing the services, plus materials, taxes and expenses; such invoice may not exceed the total purchase order amount. All services and expenses will be invoiced monthly in arrears. Payment terms are Net 30 from date of invoice.

DLT's ability to perform the support described within this proposal depends on the following project assumptions:

- Customer and/or end user will have appropriate software licenses. This is to include all associated software licenses outside of Symantec's product line.
- Customer is responsible for maintaining the technology infrastructure related to this project.
- Additional system and network administration, DBA, and similar resources are not

included in this estimate.

- Customer will provide DLT with full access to the relevant functional, technical, and business resources with adequate skills and knowledge to support the performance of services.
- Customer will provide DLT with the appropriate software and system log-ons to facilitate the performance of services.
- DLT will have access to end users and Customer project team members as needed to perform services.
- Customer and DLT each agree to designate a project manager who shall work together with the other party's project manager to facilitate an efficient delivery of services.
- The estimates included in this proposal are based on information provided by Customer, the statement of work included in this proposal, and the assumptions. All estimates are subject to change as a result of changes in the project schedule, scope, or resource requirements for given tasks/activities.
- DLT does not warrant the performance of servers, networks, or other hardware elements supplied by Customer.
- DLT will honor all holidays honored by Customer. With Customer's agreement, DLT may choose to perform services on holidays or weekends.
- Suitable back up, operating system utilities and monitoring hardware and software are assumed and are required. All of these activities are understood to be the responsibility of Customer.
- Customer is responsible for providing adequate rack space, network connectivity and power for all new hardware associated with this project.
- The proposed hardware requirements are provided as an estimate based upon the information provided by Customer. These recommendations may be updated or modified once an architectural design review has been performed as part of the implementation.
- The proposed hardware requirements assume adequate network bandwidth and network response times are present between all EV servers, client servers and the data to be archived.

By placing an order with DLT Solutions, Customer agrees to and validates these obligations and assumptions.

## **Cost**

DLT Solutions is pleased to propose the following project pricing. DLT will perform the services on a Time and Materials basis. Upon written notification, these fees and expenses are subject to change as a result of changes in the project schedule, scope, or resource requirements for given tasks/activities.

<b>DLT Part No.</b>	<b>Estimated Hours</b>	<b>Unit Price</b>	<b>Estimated Total Price</b>
DLT0030	160	\$268.75	\$43,000.00

The attached DLT Professional Services Quotation #4240660 contains specific pricing details based on information provided by Customer, included in the statement of work, and the obligations and assumptions detailed in this proposal.

DLT Solutions will invoice Customer for actual time spent performing the services. Such invoice may not exceed the total purchase order amount. All services will be invoiced monthly in arrears. The City of Columbus will not be billed for travel and other out of pocket expenses.

**Payment Terms**

DLT Solution agrees to City of Columbus payment terms are Net 30 from date of invoice. Due to the length of the project and the time and material basis, DLT will invoice City of Columbus at the completion of the project and once project completion documentation has been approved.

**Period of Performance**

The period of performance (PoP) for this proposal is twelve (12) months from the date of award. Period of Performance may be extended upon mutual written agreement.

**Acknowledgement**

Upon issue of Award, Customer agrees to all terms and conditions stated in the Statement of Work.

**Appendix A - DLT Solutions Resume Documentation**

DLT Solutions offers this document for consulting services as a reference to our consulting teams work history and credentials. If you have any questions or comments of a technical nature, please contact James Soliday, Senior Engineering Manager, at 703-708-9140 or by email at: james.soliday@dlt.com.

**Engineering Snapshot:**

Name/Role	IT Experience	Proficiency	Level*	Certifications
Consultant 1	17 Years	Enterprise Vault	3	Symantec Enterprise Vault 8,9,10
		NetBackup	3	NetBackup 6.0, 6.5, 7.0, 7.1, 7.5
ASC - Data Protection				
Consultant 2	11 Years	Enterprise Vault	2	Symantec Enterprise 6 Differences
				Symantec Enterprise 7
				Symantec Enterprise Vault 2007
		NetBackup	3	NetBackup 6 & 7 Log Analysis
Consultant 3	12 Years	SF/HA	3	NetBackup 6 & 7 Log Analysis
				NetBackup 5 for UNIX
				NetBackup 5 for Windows
Consultant 4	12 Years	NetBackup	2	NetBackup 6 & 7 Log Analysis
				NetBackup 6 & 7 for UNIX
				NetBackup 6 & 7 for Windows
		Altiris	3	Symantec Enterprise Vault 2007
				Symantec Enterprise Vault 7

				Enterprise Vault 6 & 7 Differences
		SF/HA and VVR	3	Storage Foundation 4.x and 5.x

**\*Skill Ratings are as follows:**

**0 - Novice**

Enrolled in product certification courses to build fundamental knowledge.

**1 - Technician**

Has working knowledge of product and can conduct installation and administrative procedures with assistance.

**2 - Advanced**

Demonstrates advanced knowledge of product. Ability to perform installation and administrative procedures with limited or no assistance.

**3 - Subject Matter Expert**

A true expert of product and all associated features. Able to design and implement complex product architectures.

**Consultant 1**

**Title:** Consultant

**Number of Years of Experience:** 17

**Professional Certifications**

- Symantec Enterprise Vault 2007
- Symantec Enterprise Vault 7
- Symantec Enterprise Vault 6 Differences
- Veritas Netbackup 6 for UNIX
- Veritas Netbackup 6 for Windows

**Education**

- Hartwick College, Bachelor of Arts

**Experience Summary**

17 years experience working in Information Systems management, with the past 9 years specializing in email archiving, project management, network infrastructure, and storage management. Consultant is considered by Symantec Consulting Services to be one of the top Enterprise Vault Consultants in the industry.

**Areas of Expertise**



- Implement e-mail legal and regulatory compliance requirements using Symantec’s Enterprise Vault compliance products.
- Develop statement of work and scope of work for customer requirements.
- Design project management plans incorporating, standards and policies, change control processes, test plans and risk assessments.
- Utilize PMBOK methodology to ensure proper project communication, documentation and scheduling are implemented.
- Design and implement data center infrastructure including physical layout, procurement and network / system design.
- Work with vendors to develop service level agreements for customers.
- Implement enterprise backup solutions for the Windows, Linux, Solaris, HP-UX, Unix, and AS/400 platforms using products such as Symantec’s Backup Exec and NetBackup enterprise.
- Implement storage area networks with fiber channel or iSCSI environments.
- Install and configure tape libraries, virtual tape libraries and disk based storage for data backup and retention.
- Implement e-mail archiving and file system archiving solutions for Microsoft Exchange and Windows file servers using Symantec’s Enterprise Vault product suite.
- Configure and Manage AS/400 systems for backup and performance.
- Implement, configure and manage Microsoft products including: Exchange, SQL Server, SharePoint, Windows Server operating systems, Windows Storage Server and Windows Desktop operating systems.
- Implement Microsoft Windows server technologies: Active Directory, DNS, WINS, DHCP, DFS, IIS, Group Policy, Single Instance Store, Microsoft Indexing and VSS snapshots.
- Manage conversions from legacy PBX systems to Cisco’s Call Manager VoIP solution.
- Implement retail and rental applications and their connectivity to back end databases.
- Implement Checkpoint NGX firewall and VPN solutions using the Secure Platform environment.
- Implement Antivirus, Spyware, Windows Updates and system management solutions for the enterprise.

## **Professional Experience**

### **DLT Solutions**

- Implement e-mail archiving using Symantec’s Enterprise Vault compliance products.
- IT enterprise project management including compliance and audit requirements such as Sarbanes Oxley 404.
- Data backup and data life cycle management using Symantec’s NetBackup, Backup Exe and Enterprise Vault products for the Windows, Linux, Solaris, HP-UX, AS/400 and UNIX platforms.
- Data center design and implementation.
- Application implementation and support including, but not limited to, Microsoft Exchange, SQL Server, SharePoint Portal and VMware,
- Implement and configure IBM, EMC, HP, LeftHand, Quantum, Brocade and QLogic fiber channel and iSCSI SAN solutions.
- Network and infrastructure design and implementation.

- Disaster recovery planning and implementation.

## Recent Projects

### Department of Homeland Security

Create and implement an e-mail archiving solution design for the Department of Homeland Security. The solution design reflected the department's requirement to consolidate their data centers from 17 to 2 and to centralize their Microsoft Exchange environment and e-mail archiving for the 250,000 DHS employees.

### Executive Office of the President

Senior engineer and project manager. Resolved customer e-mail archiving and backup issues involving Microsoft Exchange and Enterprise Vault and EMC SAN. Discussed best practices in archiving e-mail and revised backup processes for backing up Exchange and archived e-mail.

### USDA

Implemented Enterprise Vault email archiving at multiple USDA locations. Worked with USDA and Symantec on design and future growth requirements.

### Agilent Technologies

Senior engineer and project manager ~ Upgraded HP-UX and Windows servers at Agilent's 13 worldwide NetBackup sites. Upgraded servers and agents from NetBackup 5.1 to NetBackup 6.0. Resolved backup issues associated with 5.1 and 6.0 implementations.

### Specialty Sports Venture, LLC

**Director of Information Systems** - A joint venture between Vail Associates and Gart Companies. Denver, CO.

- Oversaw implementation of LeftHand Networks SAN/IQ solution at corporate office.
- Managed the transition to Checkpoint NGX 60 firewall solution at corporate office.
- Oversaw the transition from legacy PBX systems to Cisco's VoIP Call Manger & Unity solution at corporate office and key retail locations.
- Managed implementation and rollout of new Store21 POS retail and hardware solution at all stores.
- Managed implementation Resort Technology Partners ski rental software at all rental locations.
- Managed move of corporate headquarters data center without any disruption of service within a 45 day time window.
- Oversaw implementation of 45MB ATM network backbone at headquarters and implementation of 60 WAN Frame Relay remote sites.
- Tracked status and implementation of Sarbanes Oxley 404 compliance for organization using Microsoft Project and Microsoft's Sarbanes Oxley SharePoint accelerator. Reported weekly to the corporate partner, Vail Associates, on project status and issues. Successfully completed 404 audit with no significant deficiencies.

- Coordinated the acquisition of new corporate brands into existing IT infrastructure. Met management's tight deadlines for bringing new stores online without issues.
- Managed 4 department employees on a day to day basis. Performed weekly status meetings to review ongoing projects and deadlines.
- Managed implementation of e-comm and online rental reservation systems for 20+ web sites at Florida data center. Worked with 3rd party developers to manage systems and web site implementations.
- Managed and maintained AS/400 iSeries system and associated merchandising, warehousing, accounting, replenishment, inventory systems.
- Coordinated with bank processors to rollout out centralized credit card authorization and settlement processing for organization.

## **Ultimate Electronics, Inc. Denver, CO.**

### **Director of Network Services**

- Administer LAN at corporate office - A NetWare/NT network with approximately 150 users
- Purchase and maintain all corporate PC hardware and software
- Provide software training for users and manage staff personnel responsible for PC support
- Create and maintain software applications to streamline business operations
- Involved in creating direct marketing promotions using the PCIS Harte-Hanks marketing database
- Administer Lanier optical imaging system used in data archiving and retrieval
- Coordinate and maintain Web page development and Internet T1 connectivity
- Responsible for Internet/Intranet security, firewall maintenance and SMTP/cc:Mail e-mail gateways

### Consultant 2

**Title:** Consultant

**Number of Years of Experience:** 11

### **Professional Certifications**

- Symantec Enterprise Vault 2007
- Symantec Enterprise Vault 7
- Symantec Enterprise Vault 6 Differences
- Netbackup SME

### **Education:**

*Park University*

MBA, Computer Management Information Systems

B.S. in Management, Computer Information Systems

## **Certifications and Relevant Training**

- NetApp Accredited Storage Architect Professional (ASAP) Certified – January 2009
- Microsoft Certified Professional (MCP) – Completed in December 2008
- Veritas Certified Professional – Netbackup 6.5 for Windows – Completed May 2008
- Veritas Certified Professional – Netbackup 5.x for Windows – Completed November 2006
- A+ Certified. Completed July 2002
- USAF Certification - Workgroup/Network Manager. Completed 28 November 2000
- USAF Certification - Microsoft Front Page. Completed November 2000
- Completed Smart Force Computer Based Training (CBT) in the following fields: Information Security, Information Systems Users, Systems Administrator, Windows NT, and Network Adapter Cards.

## *Military Training*

- Computer and Network Systems Training Certification at Keesler AFB, MI. Covered Windows 2000 and 2003
- Server, Microsoft Exchange, and Cisco Command Line Interface
- Information Management Systems Training Certification at Keesler AFB, MI. Covered TCP/IP, Windows NT/2000, Active Directory, hardware and software maintenance

## **SECURITY CLEARANCE:**

TS/SCI, May 11, 2005 AFCAF

## **EXPERIENCE:**

DLT Solutions Inc.

Herndon, Virginia

September 2006 – Present

## *Senior Technical Support Engineer, Strategic Accounts*

- Spearheaded the stand-up of the Strategic Accounts Program, which focused on additional customer care and levels of support for DLTs top 25 Technical Services Partner Program (TSPP).
- In addition to Strategic Account Support, works an additional 4 – 8 tickets per week which require tier 3 support
- Advanced levels of technical expertise in Veritas Netbackup Products lines
- Extensive experience with Symantec's products, to include Enterprise Vault, and Storage Foundation/High Availability

- Strong ability to troubleshoot Symantec products on both UNIX and Windows platforms.
- Took on training manager duties to oversee TSPP training complaints with Symantec
- Helped create and configure DLT's lab environment, which includes mirrored images of Symantec's own live training sessions for their product lines.
- Extensive on hands experience with Symantec products from 12 month of traveling as a Professional Services Engineer.

Cardinal Health Inc.

Dublin, Ohio

March 2005 – September 2006

*Remote Technical Services II*

- Covered all Information Technology systems for the National Logistic Center (NLC), Cardinal Health's largest distribution center in USA.
- Day to day operation and maintenance on Windows 2000 and 2003 servers.
- Built and managed wireless network for entire NLC warehouse, to include 3 warehouse buildings needing 5 – 10 wireless access points per building.
- Built, configured, and implemented new wireless Symbol Scanners for NLC floor workers.
- Maintained and rebuilt desktops and laptops for 50 + end users in the NLC front office.

WebMD Business Services

Earth City, MO

October 1998 - Present

*System Administrator Level II*

- Hardware and software technician on all WebMD MCDS servers.
- Built, configured, and implemented new servers into the MCDS system on a monthly basis.
- Upgraded, maintained, and trouble-shot any issues with over 75 servers and network components.
- Platforms covered: Windows 2000 Server, Windows 2003 Server, Linux Red Hat, Cisco Command Line Interface, Windows Active Directory and Exchange.
- Implemented and maintained a back up system for all server data. Back up software used included Veritas Net Back up and Veritas Backup Exec.
- Configured and maintained 2 robotic libraries in the back up system (LTO and AIT).
- Helped end users with every facet of computer support. From setting up home network access to issuing new computer equipment.

- Planned and implemented migration project of the St. Louis office migration to the WebMD corporate network.

United States Air Force

HQ Air Mobility Command - Directorate of Operations

Scott AFB, IL

October 1998 - September 2003

*Network/System Administrator*

- COMSEC and Security manager for unit. Makes sure users practice and follow security standards.
- Extensive knowledge of the following platforms: Windows NT, Windows 2000, Windows XP.
- Also very well skilled in: Microsoft Exchange Server, Microsoft Office Products, Active Directory, Shiva, and Net IQ.
- Extensive knowledge of LAN/WAN/Intranet technologies, with an emphasis on TCP/IP Protocols.
- First-Line Administrator for over 65 computers on a Windows 2000 domain; to include deploying, configuring, and providing hardware and software support.
- Team leader on various projects to include network connections, hub configuration, and resolving hardware and software problems.
- Extensive knowledge of Windows 2000 environment.
- Everyday use of Active Directory.
- Researched and analyzed current hardware and software for future upgrades and purchases. In charge of upgrading equipment for entire unit of 55 users and over 65 workstations.
- Purchase Officer for hardware, software, and office supplies. In constant contact with vendors.

### Consultant 3

**Title:** Project Manager

**Number of Years of Experience:** 11

### **Professional Certifications**

- Symantec Enterprise Vault 2007
- Symantec Enterprise Vault 7
- Symantec Enterprise Vault 6 Differences
- Symantec Enterprise Vault 2007
- Symantec Enterprise Vault 7
- Symantec Enterprise Vault 6 Differences
- Veritas Netbackup 7 Log Analysis

- Veritas Netbackup 6 for UNIX
- Veritas Netbackup 5 for Windows

### **Education:**

- MCSE Learning Track, ICTS, VA, 2001-2002
- Microsoft Windows 2000 Network and Operating System Essentials
- Implementing Microsoft Windows 2000 Professional and Server
- Implementing a Microsoft Windows 2000 Network Infrastructure
- Implementing and Administering Windows 2000 Directory Services

### **PROFESSIONAL TRAINING & CERTIFICATION**

- VERITAS NetBackup 6.0 Log Analysis (SRT) Certification, 2007
- VERITAS Data Protection Professional for UNIX using NetBackup 5.0 Certification, 2007
- VERITAS NetBackup 6.0 Differences (SRT) Certification, 2006
- VERITAS Data Protection Professional for Windows using NetBackup 5.0 Certification, 2006
- QLogic Certified Technical Professional Certification, 2006
- Communications-Computer Systems Operations Craftsman (3C071) School, Keesler AFB, 2005
- Air Force Airman Leadership School, Osan AB, Republic of Korea, 2004
- Joint Aerospace System Administrator School, Hurlburt Field, 2003
- Communications-Computer Systems Operations Journeyman (3C051) Course, Pentagon, 2001
- Automated Data Processing Equipment Management Certification, Pentagon, 2000
- Communications-Computer Systems Operations Apprentice (3C031) School, Keesler AFB, 1999
- Air Force Introductory Military Training, Lackland AFB, 1999

### **SECURITY CLEARANCE**

- TS/SCI, January 4, 2008 DISCO
- CI Polygraph, September 14, 2004

### **SKILLS SUMMARY**

Windows Server NT/2000/2003, Sun Solaris 8/9/10, Red Hat Enterprise Linux 3/4, Windows 95/NT/ME/2000/XP, TCP/IP, VERITAS NetBackup 5.x/6.x, Backup Exec 9/10d/11d/12d, Symantec, Corporate Anti-virus 9/10, Ghost 8, Active Directory, DHCP, Remedy, DNS

### **Experience Summary**

- IT Professional with Top Secret Clearance and 12 years of experience in fast-paced network enterprises.
- Technical strengths in problem analysis and resolution, systems administration, and project management.
- Personal strengths in critical thinking, organization, written and oral communication, personnel management, and customer service.

## **KEY ACCOMPLISHMENTS**

- Pioneered new support center, achieving and maintaining 100 percent case closure rate.
- Performed onsite product implementation and consulting to Government customers.
- Implemented Windows 2000 server for special project supporting the Director of the National Security Agency.
- Rebuilt an Oracle database residing on a Sun Solaris Server, restored critical availability of server for customers.
- Administered Windows NT 4.0 Domain and Exchange Server supporting the Executive Office of the President.

## **2005 - Present**

### **Engineering Manager, DLT Solutions Inc., Herndon, VA**

Manager and Project Manager for DLT Professional Services, delivering world-class support and field services to U.S Government and civilian customers throughout the continental United States. Managed multiple client relationships for all customers of Symantec and DLT Professional Services.

- Pioneered new support center, achieving and maintaining a 100 percent case closure rate.
- Developed internal program controls to ensure delivery of fast and responsive technical support.
- Created "Best Practices" documentation resulting in proper delivery of all professional services.
- Performed onsite product implementation and consulting to Government customers.
- Assisted the Information Assurance team and partners with RFIs and RFQs to ensure proper technical solution for customers.
- Vetted 1099 contractors in accordance with GSA standards for professional services projects.
- Acted as chief editor for pre- and post-project documentation produced by the engineering group.
- Properly defined scopes, deliverables, and timelines for all internal and subcontracting engagements.

## **2004 - 2005**

### **NT / UNIX Systems Administrator, 32 Intelligence Squadron, Ft Meade, MD**



Systems Administrator for special projects team providing direct support to the National Security Agency, Crypto-logic Support Groups, and other Department of Defense components. Supervised the planning, coordination, and deployment of multi-platform workstations, servers, and software.

- Implemented Windows 2000 server for special project team directly supporting the Director of the National Security Agency.
- Created Symantec Ghost Corporate Server to increase production of Windows 2000 clients by 300 percent.
- Developed and maintained a media distribution website to disseminate software to remote administrators more efficiently.

## **2003 - 2004**

### **TBMCS Administrator, 607 Air & Space Comm. Squadron, Osan AB, Korea**

Windows and UNIX Systems Administrator for the Korea Combat Operations Intelligence Center consisting of multiple servers and workstations. Managed Customer Support Center, and assisted users with computer troubleshooting and analysis. Safeguarded information as the Information Systems Security Officer.

- Led and managed work center of seven personnel performing various administrative and backup procedures.
- Supervised system administration team in migration of 6 servers and 300 clients from Windows NT to Windows 2000.
- Rebuilt Oracle database residing on a Sun Solaris Server, restored critical availability for intelligence customers.

## **1999 - 2003**

### **IPMS Administrator, Air Force Pentagon Comm. Agency, Pentagon, DC**

Database Administrator for the Information Processing Management System in support of the Office of the Secretary of Defense, Secretary of the Air Force, National Military Command Center, and Headquarters United States Air Force. Managed synchronization and reconciliation of databases required to track IT assets. Performed Information Systems Security Officer duties within work center.

- Promoted to Senior Database Administrator within two years based on advanced management and technical skills.
- Managed largest IT Asset account in the United States Air Force, supporting the Secretary of the Air Force totaling over \$80M.
- Created disaster recovery solution for crucial Information Technology Asset Database to ensure continuous operations.

**Title:** Senior Engineer

**Number of Years of Experience:** 14

### **Professional Certifications**

- Symantec Storage Foundation HA UNIX
- Veritas Volume Replicator
- Symantec NetBackup 6

### **Education:**

*Rockmont College*

Major Philosophy, Minor Theology

### PROFESSIONAL EXPERIENCE SUMMARY

Consultant is a subject matter expert in Symantec Veritas NetBackup, Storage Foundation, Storage Foundation HA and related products. He is certified by VERITAS in the technologies at the highest levels and has worked with these products since about 2000. He serves as a senior support engineer for DLT Solutions' Service Center, providing 24x7 technical support to customers and solving their most complex technical problems.

Consultant is proficient in MS Windows Server 2008, Red Hat Linux, and multiple UNIX platforms. He is also proficient in MS Exchange, SQL and Oracle and how it works in conjunction with NetBackup and Storage Foundation.

He has many related areas of subject matter expertise and proficiency including SAN, NAS, Disaster Recovery, McData and Brocade switches, NetApp, IBM, Quantum and EMC storage.

### RECENT EXPERIENCE (2011 and 2012)

Installed and configured multiple instances of Storage Foundation HA at US Postal Service in Minneapolis, MN over a two year period. Platforms included Solaris and MS Windows with SQL, Oracle, Oracle RAC and File System clusters.

Installed and configured multiple instances of NetBackup and Storage Foundation HA at an Army Base near Frankfurt, Germany. Included Oracle, SQL, Exchange and File System Clusters.

Installed and configured multiple instances of Storage Foundation HA with VERITAS Volume Replicator for Lockheed Project in Syracuse, NY and Orlando, FL. Solaris and MS Windows platforms with SQL, Oracle, Oracle RAC and File System clusters. Symantec subcontracting project.

Installed and configured Storage Foundation HA at a major Washington DC area hospital. MS Windows platform with SQL and File System clusters.

Provided performance tuning and consistency checking for NetBackup and Storage Foundation in an HA Oracle RAC environment for a customer of Perot Systems. Solaris platform.

## PAST EXPERIENCE (2007 - 2009)

- Installed and configured multiple instances of Storage Foundation HA at a bank in California. Solaris platform with Oracle RAC and File System clusters.
- Installed and configured multiple instances of NetBackup at an Aerospace Company
- Installed and configured multiple instances of Storage Foundation HA with VERITAS Volume Replicator for a large retail company with 165 locations.
- Installed and configured Storage Foundation HA at a major Western U.S. area hospital. MS Windows platform with SQL and File System clusters.
- Provided performance tuning and consistency checking for NetBackup and Storage Foundation in an HA Oracle RAC environment for a major customer of SAIC. Solaris platform.

## Work History

Senior Engineer responsible for installation, configuration, support, performance tuning and troubleshooting for most complex customer storage management environments.

### **DLT Solutions, Herndon, VA.**

*Senior Systems Engineer*

*Mar 2001 to Present*

Provided technical expertise to implement VERITAS solutions for customer base. These solutions included:

- Implementation and documentation of shared storage backup solutions
- Implementation and documentation of SAN and Backup environments
- Implementation of highly available environments

### **MicroAge**

Phoenix, AZ

*IT Manager/Product Manager*

*May 1997 to Mar 2001*

Provided company IT management and software product management. The IT Manager function includes:

- Managing the internal systems such as clusters, backup and recovery, file servers, websites, email, and file management.
- Manage budgets for internal IS.
- Analyze, recommend and purchase products for infrastructure.
- Providing analysis, design and implementation expertise in backup/recovery environments.

The Product Manager function includes managing the documentation and technical marketing for the developed Storage Resource Management software, managing industry partners to insure that the software supports the latest storage software and hardware, creating functional specifications for development, and providing support to customer base. Wrote numerous white papers and documentation including:

- Software comparisons
- Strategy plans
- Case Studies

Functional product guides (installation, use)

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**Appendix B - DLT Solutions Trip Report to CoC from Past Work Performed**

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**Client Name**

City Of Columbus

**Background and Description**

DLT Solutions has been contracted to help implement upgrade NetBackup from 5.1 to 6.5 MP1.

The customer has specific criteria they are attempting to meet. To assist with the criteria, DLT will provide the following:

- Move master server and media servers to new server hardware.
- Upgrade NBU from 5.1 MP4 to 6.5 MP1.

**Daily Log****I. Monday**

- Met with customer to discuss strategy to accomplish the tasks listed above. We agreed to install NBU 5.1 on the new hardware and move the catalog from the old master and media servers before upgrading.
- We had to wait for a couple of backups to complete to even start a catalog backup. This took hours to complete and did not provide enough time to move the catalog and change the clients before daily backups began. We decided to start the next morning.

**II. Tuesday**

- Ran a catalog backup after the last backup finished. This took about an hour to complete.
- Moved tape to new library and began restore of catalog. This took another hour.
- The catalog restored to E:\VERITAS but the new installation was in E:\Program Files\VERITAS so the catalog needed to be copied. Due to the size of the image directory this took another hour or so to complete.
- We had to rebuild the devices for the ESL in NBU. The drives type was not being detected on the master when the storage device wizard was ran. This had to be changed manually and then related to the robot.
- We were able to get 5.1 MP4 up and functional on the new servers but we did not have time to upgrade to 6.5. This will be done on the next day.

**III. Wednesday**

- Began upgrade to 6.5 on master and media servers. The nbpushdata command worked fine on the master server. The nbpushdata worked fine on the media servers also.
- Ran MP1 on master and media servers.
- Checked the configuration by running a couple of backups. These started writing data correctly. We also saw some impressive transfer rates.
- We installed BMR and then found out that they did not have a license. I gave the customer a temp license so that we could configure BMR. We needed to install a Linux BMR boot server but could not get access to a server.
- We waited for backups to begin for the nightly run to make sure that they would start. We only had one error occur out of approximately 30 initial backups.

**IV. Thursday**

- Helped resolve any backup issues from the nightly backups. There were ~50 failed jobs out of ~1100. A majority of these jobs failed with status code 58. This is due to the client not knowing who the master or media servers are. This required some additional troubleshooting on the clients but the backup team does not have access to the clients.

***Summary***

Completed moving master and the five (5) media servers to new hardware and upgrading NetBackup 6.5 MP1.