

PURCHASING AND LICENSING COMMITTEE

13-0532R

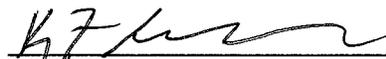
RESOLUTION AUTHORIZING CITY OFFICIALS TO ENTER INTO CONTRACT WITH EMERGENT NETWORKS FOR PURCHASE, INSTALLATION, AND FIVE-YEAR SERVICING OF ENTERPRISE BACKUP SYSTEM AND AUTHORIZING TOTAL PAYMENT NOT TO EXCEED \$325,000.

CITY PROPOSAL:

RESOLVED, that the proper city officials are hereby authorized to enter into a contract with Emergent Networks, substantially in the form of that on file in the office of the city clerk as Public Document No. _____, including authorization of sales and service orders and end-user licensing agreements, for the purchase, installation, and five-year servicing of an enterprise backup system for all city departments, for a total amount not to exceed \$325,000, including applicable sales tax, payable from the following accounts:

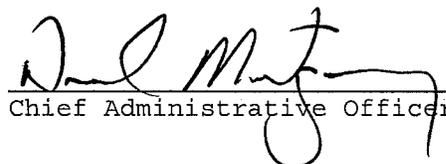
\$180,000, including applicable sales tax, from Capital Equipment Fund 250, Dept./Agency 015 (Administrative Services), Div. 2012 (Fiscal Year), Obj. 5580 (Capital Equipment), Project CE250-1202; and \$145,000, including applicable sales tax, from Capital Equipment Fund 250, Dept./Agency 015 (Administrative Services), Div. 2013 (Fiscal Year), Obj. 5580 (Capital Equipment), Project CE250-1304.

Approved:



Department Director

Approved for presentation to council:



Chief Administrative Officer

Approved as to form:



Attorney

Approved:



Auditor

MIS/ATTY SBH:de 10/16/2013

STATEMENT OF PURPOSE: The purpose of this resolution is for the acceptance of Emergent Networks proposal to the City's Request for Proposal (RFP13-16DS) for an Enterprise Network Backup System. The City's current data storage infrastructure has outgrown the existing tape backup system and has put the City at risk of data loss and extended recovery times. This contract is for the installation and configuration of CommVault Simpana software backing up to disk on an EMC Network Accessed Storage (NAS). The contract fees are comprised of installation charges in the amount of \$23,400, software charges in the amount of \$54,000, five-year software maintenance charges in the amount of \$74,844, and hardware charges in the amount of \$150,995, which includes five-year maintenance charges. There are also estimated freight and travel charges of \$4,000. This solution provides the equipment necessary for replication of data to be housed at the City Public Safety Building in the event of a disaster. This product allows for high-speed network backup of data, applications, and server operating systems. It reduces the size of the target data at rate of up to 90% and allows for customization of backup jobs to meet industry best practices. This contract will be funded through 2012 and 2013 capital funds.

**ENTERPRISE BACKUP IMPLEMENTATION GOODS AND PROFESSIONAL
SERVICES AGREEMENT**

**EMERGENT NETWORKS
AND
CITY OF DULUTH, MINNESOTA**

THIS AGREEMENT (hereinafter "Agreement"), together with all Exhibits is effective the date of attestation by the Duluth City Clerk ("Effective Date"), by and between The City of Duluth, with its principal place of business at 411 West First Street, Duluth, MN 55802, ("Customer") and Emergent Networks LLC, with its principal place of business at 3600 Minnesota Drive, Suite 150, Edina, MN 55435 ("EN"). Customer and EN are sometimes individually referred to as a "Party" or collectively referred to as the "Parties."

WHEREAS, Customer issued a Request for Proposal (hereinafter "RFP") to solicit proposals for an enterprise backup system (hereinafter "Project") for Customer, said RFP and Project which are attached hereto and fully incorporated into this Agreement as EXHIBIT A); and

WHEREAS, EN submitted a Project proposal (hereinafter "Project Proposal") attached hereto and fully incorporated into this Agreement as EXHIBIT B) in response to the RFP; and

WHEREAS, EN prepared and submitted a CommVault Implementation Project Statement of Work (hereinafter "Statement of Work"), attached hereto and fully incorporated into this Agreement as Exhibit C; and

WHEREAS, Customer selected EN based on its Project, and representations made by EN in its Project Proposal and Statement of Work; and

WHEREAS, based on representations made by EN in its Project Proposal and Statement of Work, the Customer desires to hire EN to provide and install the proposed backup solution software, provide related technical professional support services, and provide professional training and installation of those software systems as further described in both the Project and Project Proposal.

NOW, THEREFORE, in consideration of the promises and the mutual covenants, terms and conditions as hereinafter set forth, the receipt of which is acknowledged by both parties, the parties agree as follows:

1.SERVICES AND PRODUCTS. Customer agrees to purchase and EN agrees to provide to Customer such services and products (collectively the "Services and Products") as set forth in Exhibit D and the RFP, Project Proposal, and Statement of Work. EN will provide to Customer the Services and Products in accordance with and subject to the terms and conditions of this Agreement and the applicable Change Orders. In the event of a conflict between the provisions of Exhibit A and this Agreement, the terms and conditions of this Agreement shall be deemed to be controlling. In the event of any conflict between Exhibit B and Exhibit C, the terms and conditions of Exhibit B shall be deemed to be controlling. In the event of any conflict between Exhibits B or C and this Agreement and/or Exhibit A, the terms and conditions of this Agreement and/or Exhibit A shall be deemed to be controlling over Exhibit B or Exhibit C.

2. FEES AND PAYMENT. Customer agrees to pay EN no more than \$54,000 for software fees, no more than \$150,995 for hardware fees, no more than \$23,400.00 for implementation fees, no more than \$4,000 for shipping and travel fee reimbursement, and no more than \$74,844 for 60 months Premium Software Support (24 x 7 live phone support with updates). Customer agrees to make these payments as follows from Capital funds 250-015-2012-5580 CE250-1202 in an amount not to exceed \$180,000 and 250-015-2013-5580 CE250-1304 in an amount not to exceed \$143,710.90. Customer agrees to pay EN pursuant to followings schedule, based on completed events for benefit of Customer.

Percentage/Amount of Total Payment	Completed Event for Customer
100% Hardware Fees HP Hardware Sales - \$39,945 EMC Hardware Sales - \$111,050	Payable upon receipt of goods and verification by Customer that hardware operates as described.
100% CommVault Software Fees -\$54,000	Upon written Project acceptance by Customer
60 months of CommVault Premium Software Support - \$74,844	Upon written Project acceptance by Customer
EN Implementation Services -\$23,400	Payable upon full implementation and verification by Customer that hardware operates as described.
Shipping and Travel Fee Reimbursement - \$4,000 maximum	Payable upon receipt of EN invoice along with receipt of reasonable EN substantiation or supporting such expenses

3. CONFIDENTIALITY AND PRIVACY.

3.1 “Confidential Information” shall mean any information (a) concerning employees’ personal information, trade secrets, methods, processes, procedures, or any financial or business information of either party, or (b) which is identified as proprietary or confidential.

“Confidential Information” shall also include all data governed by Minnesota law pursuant to the Minnesota Government Data Practices Act, Minnesota Statutes Chapter 13, as amended, that is classified as something other than public.

3.2 Non-Disclosure. Each Party acknowledges the confidential and proprietary nature of the Confidential Information disclosed to it or obtained by it and agrees that, absent the prior express written consent of the disclosing Party, it shall not reveal or disclose the other Party’s Confidential Information to any person or entity, except (i) to the recipient Party’s directors, attorneys, accountants, auditors, subcontractors, and full-time employees who have a need to have access to such information, or (ii) to satisfy any legal requirement of a competent court or governmental authority, provided that such Party notifies the other Party, to the extent reasonably practicable, prior to making such disclosure (or if not practicable, as soon as reasonably practicable) in order that the other Party may interpose an objection to such disclosure. The receiving Party shall use the same degree of care to avoid disclosure of Confidential Information as the receiving Party uses with respect to its own confidential information of like importance, but in no event less than reasonable care.

3.3 Non-use. Neither Party will (i) make any use or copies of the Confidential Information of the other Party except as contemplated by this Agreement; (ii) acquire any right or interest in

or to the Confidential Information of the other Party except as expressly set forth in this Agreement; or (iii) commercially exploit the Confidential Information of the other Party.

3.4 Customer Personal Information. Unless otherwise expressly set forth in a Change Order, Customer will not provide EN with access to Customer Personal Information. "Customer Personal Information" means, (i) with respect to the employees, customers, patients and agents of Customer, any of the following: first and last name, birth date, phone numbers, e-mail address, medical record numbers, social security number, certificate or license numbers, vehicle identifiers, and credit card account information, characteristic or code; (ii) any "non-public personal information as that term is defined in the Gramm-Leach-Bliley Act (15 USC 6801, et seq.), as amended, and the regulations relating thereto; and (iii) "protected health information" and "individually identifiable health information," each as defined in the Health Insurance Portability and Accountability Act (45 CFR 160.103).

4. INDEMNIFICATION. EN agrees to defend, indemnify, and hold harmless Customer, its affiliates, agents, officers and employees against all third party claims, costs, expenses (including reasonable attorney's fees) and liabilities arising out of the infringement of any United States patent, copyright or other intellectual property right resulting directly from Customer's use of intellectual property developed by EN and used to provide the Services to Customer.

5. LIMITED WARRANTY. EN warrants that it will provide the Services: (a) in an effective, timely, and professional manner; (b) in compliance with applicable industry standards and practices; (c) in accordance with the description of such Services found in the applicable Statement of Work.

6. LIMITATION OF LIABILITY. UNDER NO CIRCUMSTANCES SHALL EITHER PARTY BE LIABLE TO THE OTHER PARTY, OR ANY THIRD PARTY, FOR ANY LOST PROFITS, LOSS OF DATA, OR SPECIAL, CONSEQUENTIAL, INCIDENTAL OR PUNITIVE DAMAGES ARISING OUT OF OR RELATING TO THIS AGREEMENT, WHETHER UNDER CONTRACT LAW, TORT LAW, WARRANTY OR OTHERWISE, EVEN IF THE PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH LOSS OR DAMAGE. EN'S AGGREGATE LIABILITY FOR ANY CLAIMS OR OBLIGATIONS ARISING OUT OF OR RELATING TO THIS AGREEMENT SHALL BE LIMITED TO THE AMOUNT PAID BY CUSTOMER TO EN UNDER THIS AGREEMENT FOR THE FOR THE SERVICES GIVING RISE TO SUCH CLAIM(S) FOR THREE (3) MONTHS IMMEDIATELY PRECEDING THE EVENTS GIVING RISE TO SUCH CLAIM(S).

7. TERM AND TERMINATION.

7.1 Term and Renewal. The term of this Agreement shall commence upon the Effective Date and continue five (5) years.

7.2 Termination.

(a) Termination by Either Party. This Agreement may be terminated by either Party if the other Party is in material breach of this Agreement which has not been cured within thirty (30) days of receipt of written notice of such material breach.

(b) Termination By Customer. This Agreement and/or any Change Orders may be terminated by Customer without cause upon at least thirty (30) days prior written notice, provided that if Customer elects to terminate this Agreement prior to the expiration of the Term, Customer shall pay EN a pro-rata fee (hereinafter the "Termination Fee") of one-hundred percent (100%) of the total fees due and payable pursuant to this Agreement.

8. NOTICES. Any notice permitted or required by this Agreement must be in writing and shall be deemed given when delivered to the applicable address set forth below by (a) registered or certified mail, return receipt requested; (b) overnight delivery with a nationally recognized courier; or (c) hand delivery.

If to Customer:

Attention: Elysia Hoium
City of Duluth, MIS
Room 210A
411 W 1st Street
Duluth, MN 55802

If to EN:

Emergent Networks
Attn: Gary Anderson, CEO
3600 Minnesota Drive
Suite 150
Edina, MN 55435

9. FORCE MAJEURE. Neither Party shall be held liable for any delay or failure in performing any obligation under this Agreement where cause for such failure or delay is beyond the Party's reasonable control and without its fault or negligence, including, but not limited to, Acts of God, acts of civil or military authority, government regulations, embargoes, epidemics, war, terrorist acts, riots, insurrections, fires, explosions, earthquakes, nuclear accidents, floods, power blackouts, unusually severe weather conditions, or acts or omissions of transportation common carriers. If any force majeure event affects EN's ability to deliver Services, then EN shall use reasonable efforts to implement its applicable redundant resources or other back-up solutions.

10. NON-WAIVER. EN's failure at any time to enforce any of the provisions of this Agreement shall not constitute a waiver of such provision, right, remedy or option or in any way affect the validity of this Agreement. EN's waiver of any default shall not be deemed a continuing waiver, but shall apply solely to the instance to which such waiver is directed.

11. SEVERABILITY. Every provision of this Agreement shall be construed to be valid and enforceable. If any provision of this Agreement so construed is held by a court of competent jurisdiction to be invalid, illegal or otherwise unenforceable, such provision shall be deemed severed from this Agreement, and all other provisions shall remain in full force and effect.

12. CHOICE OF LAW AND VENUE. This Agreement shall in all respects be governed by and interpreted, construed and enforced in accordance with the laws of the State of Minnesota, without regard to conflict of law principles. Parties expressly agree that the exclusive jurisdiction for any claim or action arising out of or relating to this Agreement shall be in the state or federal courts located within the State of Minnesota.

13. ASSIGNMENT. Neither party may assign, delegate or otherwise transfer this Agreement or any of its rights or obligations hereunder without the prior written consent of the other.

14. BINDING EFFECT. This Agreement shall be binding upon and inure to the benefit of the parties and their respective successors and permitted assigns. Any attempted assignment not in compliance with this paragraph shall be null and void.

Exhibit A
City Request for Proposal



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1 Statement of Work

1.1 Purpose

The purpose of this Request for Proposal (RFP) is to invite prospective vendors to submit a proposal to supply an enterprise backup software solution to the City of Duluth. The RFP provides vendors with the relevant operational, performance, application, and architectural requirements of the solution.

Preference will be given to suppliers who have demonstrated a clear understanding of the enterprise backup solution requirements, overcome technical challenges presented by the requirements, and have a proven track record designing, implementing, and supporting proposed solutions. The City of Duluth is seeking a supplier capable of providing a comprehensive, cost-effective solution based on all of the requirements encompassed within this RFP, a solution with a well-defined architecture, and a solution that includes a comprehensive plan for continuing service and support. Suppliers are required to architect/propose a solution that best meets the City's stated requirements using industry best practices.

1.2 Coverage & Participation

The intended coverage of this RFP, and any agreement resulting from this solicitation, shall be for the use of all departments at the City of Duluth along with any satellite offices. The City of Duluth reserves the right not to enter into any contract, to add and/or delete elements, or to change any element of the coverage and participation at any time without prior notification and without any liability or obligation of any kind or amount.



2 General Information

2.1 Original RFP Document

City of Duluth shall retain the RFP, and all related terms and conditions, exhibits and other attachments, in original form in an archival copy. Any modification of these, in the vendor's submission, is grounds for immediate disqualification.

2.2 The Organization

The City of Duluth city hall is located in the heart of downtown at 411 W 1st St. with approximately 24 WAN sites and several satellite and mobile connected users. Much of the data produced and received by City employees is Government Data and is subject to Data Retention schedules. In adhering to the retention schedules set forth, the City is reaching the maximum allowable capacity for backup duration and storage media and is looking to utilize updated technology to make backing up data more efficient with improved administration options.

In past years the City has invested in technology such as virtualization, SAN storage and dual data centers that it would like to utilize in the implementation of an enterprise backup solution. The City would like to see reduced backup times, reduced storage size, improved file restore and version control, improved recovery rates and improved archival and retention options. With several City departments contributing to the data, including Public Safety, utilities and finance the backup and recovery to restore services is very critical.

City of Duluth

- Industry: Government
- Sector: Public
- Services Offered: Police, Fire, Utilities, Parks and Recreation, Street Maintenance, Construction Services, Community Development, Financials, Facility Management, Fleet Management, Library, Human Resources, Mayoral and Council, Administration, Information Technology, Engineering, etc.
- Recovery objectives: Network File Shares, Exchange E-mail, Microsoft SharePoint, SQL Databases
- Major drivers for Enterprise Backup: Reduced Backup Times, Reduced Storage Size, Improved File Restoration, Version Control, Improved Recovery, Improved archival and retention, Consolidated Administration, and Disk to Disk Backup options.

2.3 Existing Technology Environment

Our existing backup server is running the application ArcServe v16 on Windows Server 2003. We have one additional backup server at a WAN site running the application ArcServe v12 on Windows Server 2003. We have 75 servers on a scheduled backup rotation.

The primary target is an IBM LTO 4 library. The data is compressed, not encrypted.

The following is an additional listing of our current technology environment:

Windows Server 2000, 2003, 2008 R2, both 64 and 32 bit.

Exchange Server 2010 SP2

VMware ESX 4.1

MS SQL Server 2005, 2008, 2008R2

Cisco UCS Chassis with B200 and B250 Blades

HP Proliant GL380 G6 Servers

NetApp 3140 and 3240 SANs connected FC to UCS Chassis



**City of Duluth
Management Information Systems**

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Technical Standards Reference Model				
Application Layer	Application Presentation			
	Corporate Applications	COTS	New World Logos VCS Time & Attendance	ESRI ArcServe SharePoint
		Custom	Time Card System	
		Hosted	N/A	N/A
	Business Applications	COTS	Speech Exec Fire Programs RT Vision	CRW Trakit Polaris Infor EAM
		Custom	N/A	N/A
		Hosted	N/A	N/A
	Core Application Services	COTS	Microsoft Exchange Citrix	Active Directory MS System Center
		Custom	N/A	N/A
		Hosted	N/A	N/A
Data Layer	Database	e.g. Data Design and Schemas	SQL 2008 R2 SQL 2000 SQL 2005	
		Size Estimations REID TO GET	Total: 10 TB Exchange DB: 400 GB SQL DB: 200 GB SharePoint: Scheduled for implementation VM Guest OS only: 2 TB Unstructured File Data: 7 TB	
	<i>Retention Policy</i>	Archive: Varies by data type. Up to 7 year. Backup: 90 days		
Infrastructure Layer	Desktop/Laptops	Not included in need for backup solution		
	Storage subsystems	NetApp Filer 3140, 3240		
	Servers	Cisco UCS B200, B250	HP GL380 G6	
	Server Virtualization	VMWare ESX 4.1 Cisco UCS B200, B250	HP GL380 G6	
	WAN	Two WAN sites hosting servers VMWare ESX 4.1	Connected via 1Gb fiber link	



2.4 Virtualization Environment

The City of Duluth currently has in place a mix of virtualization technology:

- Server virtualization is VMWare version ESX 4.1 running on CISCO UCS B200 and B250 Blades connected to a NetApp 3140 SAN. We have six hosts on two chassis running 80 guests.
- CISCO UCS chassis are connected at 10 Gb to the Nexus Core.
- The system was implemented in 2012.
- A second data center with a UCS Stack and NetApp 3240 designated as a secondary site.
- The system is currently available 24x7x365.
- The system is used corporate wide.
- There are 950 users, connecting to various applications through varying connections
- CPU utilization averages 25%.
- The City of Duluth technical staff is currently responsible for maintenance, operation, availability, update, backup, and support.

2.5 Schedule of Events

The following is a tentative schedule that will apply to this RFP, but may change in accordance with the organization's needs or unforeseen circumstances. Changes will be communicated by e-mail to all invited bidders.

Issuance of RFP	6/3/2013
Technical Questions/Inquiries Due	6/14/2013, 2:00pm CST
RFP Closes	6/21/2013, 2:00pm CST
Complete Initial Evaluation	7/3/2013
Presentations of finalists	7/12/2013
Final Evaluation and Selection	7/22/2013
Final Selection Notification	7/31/2013 (Pending Council Approval)

3 Proposal Preparation Instructions

3.1 Vendor's Understanding of the RFP

In responding to this RFP, the vendor fully accepts the responsibility to understand the RFP in its entirety, and in detail, including making any inquiries to the City of Duluth as necessary to gain such understanding. The City reserves the right to disqualify any vendor who demonstrates less than such understanding. Further, the City of Duluth reserves the right to determine, at its sole discretion, whether the vendor has demonstrated such understanding. That right extends to cancellation of award if award has been made. Such disqualification and/or cancellation shall be at no fault, cost, or liability whatsoever to the City of Duluth.

3.2 Good Faith Statement

All information provided by the City of Duluth in this RFP is offered in good faith. Individual items are subject to change at any time. City of Duluth makes no certification that any item is without error. The City is not responsible or liable for any use of the information or for any claims asserted therefrom.



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3.3 Communication

Verbal communication shall not be effective unless formally confirmed in writing by a specified procurement official in charge of managing this RFP process. In no case shall verbal communication govern over written communication.

3.3.1 **Vendors' Inquiries.** Applicable terms and conditions herein shall govern communications and inquiries between the City of Duluth and vendors as they relate to this RFP. Inquiries, questions, and requests for clarification related to this RFP are to be directed in writing to:

RFP Process Inquiries

City of Duluth
Purchasing
411 W 1st St
Room 100

Attention: Dennis Sears
Telephone: (218) 730-5003
E-mail: dsears@duluthmn.gov

Technical Specification Inquiries

City of Duluth
MIS
411 W 1st St
Room 210A

Attention: Elysia Hoium
Telephone: (218) 730-5139
E-mail: ehoium@duluthmn.gov

3.3.2 **Informal Communications** shall include, but are not limited to: requests from/to vendors or vendors' representatives in any kind of capacity, to/from any City of Duluth employee or representative of any kind or capacity with the exception of Elysia Hoium for information, comments, speculation, etc. Inquiries for clarifications and information that will not require addenda may be submitted verbally to the named above at any time.

3.3.3 **Formal Communications** shall include, but are not limited to:

- Questions concerning this RFP must be submitted in writing and be received prior to 6/14/2013, 2:00pm CST.
- Errors and omissions in this RFP and enhancements. Vendors shall recommend to the City of Duluth any discrepancies, errors, or omissions that may exist within this RFP. With respect to this RFP, vendors shall recommend to the City any enhancements, which might be in the City of Duluth's best interests. These must be submitted in writing and be received prior to 6/14/2013, 2:00pm CST.
- Inquiries about technical interpretations must be submitted in writing and be received prior to 6/14/2013, 2:00pm CST. Inquiries for clarifications/information that will not require addenda may be submitted verbally to the buyer named above at any time during this process.
- Verbal and/or written presentations and pre-award negotiations under this RFP.
- Addenda to this RFP.

3.3.4 **Addenda.** The City of Duluth will make a good-faith effort to provide a written response to each question or request for clarification that requires addenda within 3 business days. All responses to technical inquiries will be published in a full addenda on 6/17/2013 to the City's website at http://www.duluthmn.gov/purchasing/bid_information.cfm

The City of Duluth will not respond to any questions/requests for clarification that require addenda, if received after 6/14/2013, 2:00pm CST.



3.4 Proposal Submission

Proposals must be delivered sealed to:

Purchasing - Dennis Sears
City of Duluth
411 W 1st St
Room 100

on or prior to 6/21/2013, 2:00pm CST. The City of Duluth shall not accept proposals received by fax. Vendors are to submit 2 original copies of proposal marked "Original" and 2, marked "Copy." Each original and copy must be individually bound.

3.5 Method of Award

The evaluation of each response to this RFP will be based on its demonstrated competence, compliance, format, and organization. The purpose of this RFP is to identify those suppliers that have the interest, capability, and financial strength to supply the City of Duluth with an Enterprise Backup Solution identified in the Scope of Work.

Evaluation Criteria:

- 1 Requirements. Evaluation of the supplier's overall solution with regard to how well it satisfies our backup and recovery requirements. Areas evaluated include planning, scheduling, designing, implementing, and managing a comprehensive solution incorporating the latest technology and industry best practices.
- 2 Experience. Evaluation of the supplier's experience implementing proposed solution. Supplier must demonstrate that it is capable of providing a solution that meets the requirements of this RFP and encompasses flexibility, scalability, performance, management, security, and usability while leveraging our existing system components where feasible. Evaluation of the supplier's track record of product service, support, and customer satisfaction. Supplier commitment to developing, enhancing, and maintaining systems and flexibility of systems to meet future changing business needs.
- 3 Security. The solution must clearly demonstrate that it will introduce no unacceptable business risk to the integrity, confidentiality, and availability of City of Duluth information assets or resources.
- 4 Architecture. The proposed solution must meet or exceed all City of Duluth architecture standards outlined within this RFP. The solution must be scalable, flexible, robust, and perform well.
- 5 System Administration. The solution must provide comprehensive system administration and management that is flexible for rapid, efficient, and cost-effective configuration changes.
- 6 Integration. The solution must demonstrate the capability of integrating with existing solutions as well as permit incorporation of future technological advances.
- 7 Capability of vendor to meet or exceed requirements set forth in the Scope of Work.
- 8 Expressed interest in working with City of Duluth and ability of vendor to communicate its vision and capacity for establishing a relationship that addresses current and future needs and trends in the industry.
- 9 Affordability of product(s) and support available from the vendor.
- 10 Financial stability of vendor.

3.5.1 Selection and Notification

Vendors determined by the City of Duluth to possess the capacity to compete for this contract will be selected to move into the negotiation phase of this process. Written notification will be sent to these vendors via mail. Those vendors not selected for the negotiation phase will not be notified.



4 Scope of Work, Specifications & Requirements

4.1 Functional Requirements

Requirement	Criteria
Backup/Restore in Virtual Server Infrastructure	With virtualization becoming an ever growing part of our core server infrastructure, the vendor must demonstrate how its solution provides maximum efficiency and effectiveness in backing up and restoring in our virtual infrastructure environments. Efficiency refers both to speed and reduced resource overhead, and effectiveness refers to restore granularity. Demonstrate how virtual environments can be restored at the system, data store, and individual object (file) level.
Data Deduplication Implementation	Demonstrate how data deduplication is implemented in the backup software – host, target inline, target post process. Show us how deduplication will lead to direct savings on hardware resources and make backup processes more efficient.
Integration with Storage Arrays	Demonstrate how the solution can leverage array side data availability features such as storage snapshots. If the vendor has replication/snapshot functionality in software, demonstrate how it is more efficient than what we have (and have already paid for) in hardware.
Capabilities across Multiple Backup Targets	Backup architecture is changing. Vendor should demonstrate capabilities to function with our current backup targets (such as a tape library or a disk array) but also provide information on its support for a wide variety of targets – tape, disk, and emerging cloud options. Also demonstrate how the software can manage backup across a primary, secondary, and tertiary chain (disk to tape, disk to disk, disk to disk to tape, disk to disk to cloud).
Support for Multiple Platforms	Our infrastructure is heterogeneous. Solution must be certified to support Windows Server 2003, 2008, 2008 R2, 2012, and Linux.
Restore Granularity	Demonstrate the breadth of restore granularity in the proposed solution. For example, how is the restore of a single document in a SharePoint data store managed? Another example is how to restore a single user's Exchange mailbox?
Application Awareness	Given our major applications noted above, is there application specific awareness in the solution to cater to the peculiar requirements for executing efficient backups and restore for these applications including files that are open or in use at the time of backup.



Usability/Manageability	Reduction of management time and effort is an important component of our strategy. Demonstrate the management console for the solution showing how usability is balanced with robust capabilities.
Broader Data Management	Show how the solution fits into a broader data management system, including activities such as archiving (short-term and long-term), indexing, storage resource management, and e-discovery. Show capability to manage data to comply with data retention policies.

4.2 Technical Specifications

Requirement	Criteria
Architectural Map	Detailed map indicating the technical requirements for the solution. Including such things as agents, media server, management server, etc.
Server Capacity Recommendation	Recommendation on the required server capacity to host the solution in terms of expected number of VMs per core as well as the expected amount of memory per VM.
Storage Capacity Recommendation	Recommendation on the expected amount of storage capacity required on the target devices or services. Specifically we want an estimate of post-dedupe requirements.

4.3 Operations & Support

Requirement	Requirements Criteria
Implementation Support	Provides complete turnkey onsite implementation and project management support.
Customer Support	Provides toll free customer support 24 hours, seven days per week. Provide documentation of response and resolution times (including optional levels).
Training	Provides onsite training to technicians. Curriculum and duration should be detailed.
Software Updates	Provides future software releases and updates to all applications as part of regular software maintenance fees.
Technical Documentation	Provides technical documentation for support staff including system overviews, design, flowcharts, and file layouts.
User Manuals	Provides complete set of user manuals for all software applications to document and explain system features and functions.



5 Vendor Qualifications & References

All vendors must provide the following information in order for their proposal to be considered:

1. A brief outline of the vendor company and services offered, including:
 - a. Full legal name of the company.
 - b. Year business was established.
 - c. Number of people currently employed.
 - d. Income statement and balance sheet for each of the two most recently completed fiscal years certified by a public accountant.
2. An outline of the product line-up it currently supports.
3. A description of geographic reach and market penetration.
4. An outline of partnerships and relationships to date.
5. An outline of current and future strategies in the marketplace.
6. Information on current clients, including:
 - a. Total number of current clients.
 - b. A list of clients with similar needs using the same software.
 - c. Evidence of successful completion of a project of a similar size and complexity utilizing staff still employed by vendor.
7. References: Contact information for 3 references (if possible) from projects similar in size, application, and scope, and a brief description of their implementation.



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Management Information Systems**

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Relevant Client List:

Reference 1	
Organization Name	
Industry	
Contact Name and Title	
Phone Number	
E-mail Address	
Number of users	
Product name and version number	
Installation time frame	
Go-Live date	
Number of client business staff involved	
Number of client IT staff involved	
Number of supplier staff	
Reference 2	
Organization Name	
Industry	
Contact Name and Title	
Phone Number	
E-mail Address	
Number of users	
Product name and version number	
Installation time frame	
Go-Live date	
Number of client business staff involved	
Number of client IT staff involved	
Number of supplier staff	



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Reference 3	
Organization Name	
Industry	
Contact Name and Title	
Phone Number	
E-mail Address	
Number of users	
Product name and version number	
Installation time frame	
Go-Live date	
Number of client business staff involved	
Number of client IT staff involved	
Number of supplier staff	



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6 Budget & Estimated Pricing

All vendors must fill out the following cost breakdown for the implementation of their enterprise backup solution for the City of Duluth's project as described in this RFP. The vendor must agree to keep these prices valid for 90 days as of 7/12/13.

6.1 Five Year Total Cost Summary

Provide a five year cost summary as displayed below.

Five Year Total Cost Summary						
Costs	Total	Year 1	Year 2	Year 3	Year 4	Year 5
Total Licensing of Product						
Hardware Cost (if consolidated with solution)						
OS Licensing (If required for product)						
Documentation & Training						
Maintenance						
Installation						
Integration						
Project Management						
Miscellaneous						
Other (specify)						
Total:						



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7 Vendor Certification

This certification attests to the vendor's awareness and agreement to the content of this RFP and all accompanying calendar schedules and provisions contained herein.

The vendor must ensure that the following certificate is duly completed and correctly executed by an authorized officer of your company.

This proposal is submitted in response to Request for Proposal for Enterprise Backup Solution issued by the City of Duluth. The undersigned is a duly authorized officer, hereby certifies that:

(Vendor Name)

agrees to be bound by the content of this proposal and agrees to comply with the terms, conditions, and provisions of the referenced RFP and any addenda thereto in the event of an award. Exceptions are to be noted as stated in the RFP. The proposal shall remain in effect for a period of 90 calendar days as of the Due Date of the RFP.

The undersigned further certify that their firm (check one):

- IS
- IS NOT

currently debarred, suspended, or proposed for debarment by any federal entity. The undersigned agree to notify the City of Duluth of any change in this status, should one occur, until such time as an award has been made under this procurement action.

Person(s) authorized to negotiate on behalf of this firm for the purposes of this RFP are:

Name: _____ Title: _____

Signature: _____ Date: _____

Name: _____ Title: _____

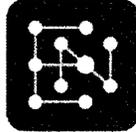
Signature: _____ Date: _____

Signature of Authorized Officer:

Name: _____ Title: _____

Signature: _____ Date: _____

Exhibit B
Emergent Network's Proposal



Emergent Networks

Barry Bates

Account Executive

Phone (612) 213-2543

barryb@EmergentNetworks.com



CommVault Simpana: Enterprise Backup Solution

**RFP RESPONSE
PREPARED FOR:**



**City of Duluth
411 West 1st Street
Room 100
Duluth, MN 55802**

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Dear Mr. Sears and City of Duluth Team,

Thank you for the opportunity to propose a solution to modernize City of Duluth's data management infrastructure. CommVault is redefining how organizations manage and protect data with Simpana Enterprise Software. CommVault Simpana addresses all of City of Duluth's key objectives as outlined in the RFP.

City of Duluth Key RFP objectives:

- ✓ Reduce length of backup window
- ✓ Reduce backup footprint and client impact
- ✓ Ability to scale and meet long-term growth and retention requirements
- ✓ Backup/restore in virtual server infrastructure
- ✓ Data duplication implementation
- ✓ Integration with storage arrays (snapshots in particular)
- ✓ Capabilities across multiple backup targets
- ✓ Support for multiple platforms (Windows and Linux)
- ✓ Restore granularity (SharePoint documents, Exchange e-mail messages, etc.)
- ✓ Application awareness (VMware, Exchange, SharePoint, SQL, etc.)
- ✓ Ease of use/manageability
- ✓ Fits into a broader data management system, including archiving, indexing, storage resource management, and e-discovery

CommVault's Simpana software is a strategic platform for comprehensive data management that will provide City of Duluth with the industry's leading data management solution. Industry point solutions including hardware and software products simply cannot provide this level of functionality, value, integration, and efficiency in one enterprise solution. CommVault Simpana ultimately provides City of Duluth:

- ✓ ***Lowest Total Cost of Ownership***
- ✓ ***Flexibility to choose hardware that best meets the need of the business***
- ✓ ***Most Innovative Technology addressing all of your requirements***
- ✓ ***Award Winning Support and Experience***

Emergent Networks is excited to present this comprehensive solution. We are confident you will find our recommendations compelling. We look forward to the opportunity to review this proposal with you at your earliest convenience.

Respectfully submitted,

Emergent Networks & CommVault

1.0 About Emergent Networks

Emergent Networks, LLC provides Technology consulting and solutions for customers by leveraging current and emerging technologies relevant to your business. We provide consulting services that deliver real results. Emergent Networks has a history that goes back 25 years and has grown to include a staff of highly qualified, talented employees in diverse specialty areas. We offer solutions that range from infrastructure architecture to unified communications to cloud backup to mobile apps—all of them customized to meet your needs today and to grow with you as you grow. Our team is motivated, industrious and sincere, and is enthusiastic about strengthening our relationships with existing clients and earning the trust of new ones. Emergent Networks.

Top 5 reasons clients trust Emergent Networks to solve their IT issues.

-Engineering expertise. Stable, available, scalable solutions from outstanding engineering talent. Networks work like they're supposed to, and keep working for the long haul. We have **32** full time engineers on staff.

-Experience. Hands-on, problem solving skills and professionalism earned from more than two decades of meeting client's needs. Deep involvement in highly regulated industries contributes to extensive knowledge of dependable, steam lined networks.

-Reputation. Client retention rate nearly 100% and more than half of new business comes from referrals.

Versatile. Broad set of skills and engineering expertise, allowing clients to work with a single company to resolve issues across the IT spectrum, including software development. No need to work with different vendors to solve different IT challenges.

Reliable. Founded by engineers in 1985 and remains an engineering driven firm from the top down. Exemplary track record of providing IT consulting services to clients for the lifetime of their businesses.

Emergent Networks has been named to the Minneapolis St. Paul Business Journal Fast 50. The annual listing encompasses the fastest growing private companies in the Twin Cities based on revenue and growth over the past three years.

2.0 About CommVault Systems, Inc.

CommVault Systems, Inc., was incorporated in Delaware in 1996, and currently has over 1,500 full-time employees.

CommVault's sole product is the Simpana solution, along with maintenance and services associated with that solution.

CommVault is a global organization with sales, service, and support capabilities worldwide to accommodate the needs of multi-national organizations. Our headquarters locations include New Jersey, USA (North America Headquarters,) United Kingdom (European Headquarters), Beijing, China (North Asia Headquarters), and Sydney, Australia (Asia-Pacific & Japan Headquarters). CommVault offers a variety of enterprise license agreement options to accommodate global purchasing, pricing and licensing. These include centralized purchasing for global deployment, global pricing, flexible license agreements and more. CommVault has many global enterprise customers and understands the dynamics involved with global deployments.

CommVault works with a number of strategic partners, including Dell, HDS, HP, Microsoft, NetApp, VMware, Novell, Oracle, Sun Microsystems, and Bull.

CommVault continues to enhance its product capabilities to align with industry trends for storage and system resource optimization. CommVault's comprehensive capabilities for software-managed data deduplication and storage management, including Virtual Server protection and Snapshot automation, are indicative of CommVault's emphasis in providing customers with high efficiency and low complexity data management, access, and protection. CommVault is the industry market leader for product capabilities that drive cost from these operations, as evidenced by its position as first to market with comprehensive data deduplication within its core product, first to market support with Microsoft Server and Exchange platforms, and its leading automation capabilities for database protection through both streaming backups and snapshots for most Tier 1 database products. Continued enhancements associated with storage automation within the data center are contemplated in future releases.

CommVault currently has over 18,000 customers. These customers include large global enterprises, small and medium sized businesses and government agencies, and indirect sales through our value-added resellers, systems integrators, corporate resellers and original equipment manufacturer partner channels. Currently, we license our software applications to customers in a broad range of industries, including retail, banking, insurance and financial services, government, healthcare, pharmaceuticals and medical services, technology, legal, manufacturing, utilities, and energy. Our broad reach is possible because the solution stack is designed to scale from small organizations to large enterprises using products that are built on a common code base, a differentiator that no competitor can match. Further information on our customers can be found at the following location:

<http://www.commvault.com/customers>

Here you will find case studies, videos, and analyst reports highlighting our strengths in implementation and continued ease of use.

3.0 Executive Summary

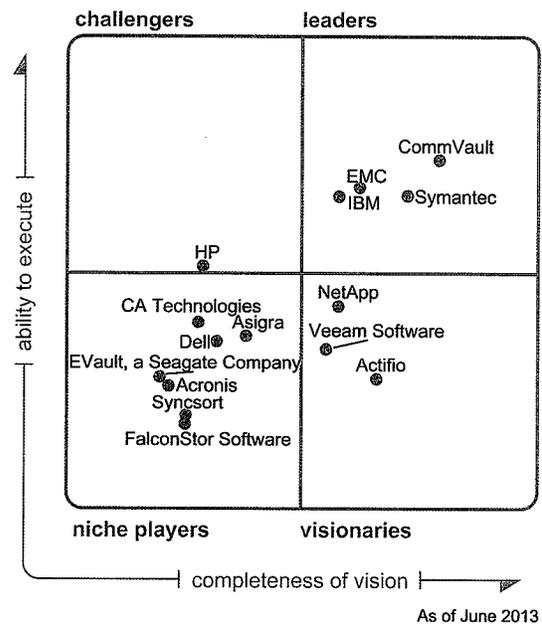
The City of Duluth RFP is an excellent example of an organization “rethinking” their approach to traditional data management challenges. The legacy approach to solving these challenges typically brings forth a number of disparate point solutions leading to integration challenges, operational inefficiencies, and ultimately, an unsustainable cost model. As data grows and data management needs become more complex, this legacy approach forces organizations to add more tools and purchase more infrastructure to meet the needs of the organization. Over 18,000 customers worldwide have made the switch to CommVault as they recognize the unsustainability of this legacy approach.

CommVault has redefined the data management market with a unique approach we call “Singular Information Management.” CommVault’s focus is on providing our customers with better, more cost effective ways to protect, manage, access and derive real business value from their data. We do this through a single enterprise solution – Simpana. CommVault’s single platform approach to solving these challenges has proven repeatedly to reduce risk, cost and dramatically improve operational efficiencies, even for customers with explosive data growth and complex, heterogeneous environments.

Emergent Network’s proposal is built around our Simpana solution for backup, deduplication, and replication and includes a mix of software, hardware, services, training, and support to ensure the long-term success of the project.

CommVault has studied the Request for Proposal carefully reviewing the City of Duluth objectives and we are confident our recommendations will provide City of Duluth with the right economic and technical solution.

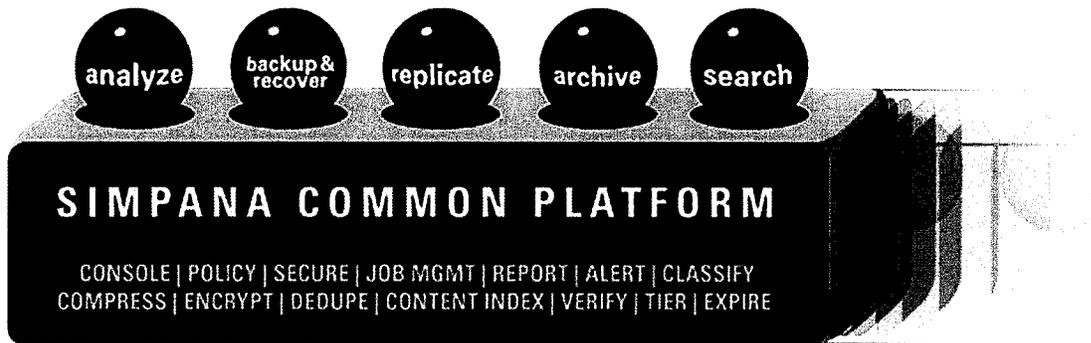
For the third consecutive year, CommVault has been positioned in the "Leaders" quadrant in Gartner Inc.'s Magic Quadrant for Enterprise, Backup and Recovery, published June 2013. According to Gartner, *"Of all the backup vendors, CommVault has been the most vocal and articulate about the future of backup shifting toward the exploitation and management of storage array and NAS replication and snapshots, seeking to serve as a manager of managers over a variety of backup and storage options from a central console."*



4.0 CommVault Solution: Summary

CommVault's Singular Information Management approach simplifies backup and recovery, lowers data management costs and mitigates compliance risk. Today, Simpana seamlessly supports leading applications, enabling organizations to centrally manage all aspects of data protection to meet the latest industry mandates and ensure the highest levels of data protection and information management.

Simpana's software modules share a common set of back-end services and advanced capabilities, and effortlessly "talk" to one another through the common platform. There is no need to purchase fragmented, expensive third-party tools, hardware, or appliances. This truly unified, or "singular," architecture performs all data management functions quickly, easily and reliably from a single platform. Managed data, content indexed into a single virtual pool, can be viewed across all applications, platforms, devices and locations. The advanced features and capabilities unique to this architecture solve a myriad of problems related to the storage and access of your data and information.



5.0 CommVault Solution: Functional Requirements

5.1 Backup/Restore in Virtual Server Infrastructure

City of Duluth Requirements / Objectives

With virtualization becoming an ever growing part of our core server infrastructure, the vendor must demonstrate how its solution provides maximum efficiency and effectiveness in backing up and restoring in our virtual infrastructure environments. Efficiency refers both to speed and reduced resource overhead, and effectiveness refers to restore granularity. Demonstrate how virtual environments can be restored at the system, data store, and individual object (file) level.

- CommVault's proposed solution fully meets and/or exceeds these objectives as defined by City of Duluth's requirements.**

CommVault Simpana is the industry's most complete VMware data management platform. Simpana:

- ✓ Leverages VMware vStorage APIs for Data Protection (VADP) for the fastest and most efficient backups of VMware virtual machines.
- ✓ Supports all operating modes of VADP: LAN-based data transfer; SAN-based data transfer (LAN-free); and Hot-Add mode for virtual machine-based proxies.
- ✓ Leverages VMware's Changed Block Tracking (CBT) technology to only transfer changed blocks from the ESXi server to the CommVault server.
- ✓ Supports file-level restore and complete image-level VM restore from "single pass" backup of VM, for most Windows and Linux file systems.
- ✓ **Agentless:** No CommVault agent needs to be installed on ESXi servers, vCenter servers, or virtual machines (except for virtual machines running databases such as SQL, Exchange, etc.).
- ✓ Optionally integrates with storage array-based snapshots (i.e. NetApp Snapshot) to automate the process of snapshot creation and backups of snapshots, all from a single interface.
- ✓ Automates virtual machine discovery and protection to ensure no VM goes unprotected.
- ✓ Includes a vCenter plug-in for self-service restore of VMs (including file-level, point-in-time browse).

5.2 Data Deduplication Implementation

City of Duluth Requirements / Objectives

Demonstrate how data deduplication is implemented in the backup software – host, target inline, target post process. Show us how deduplication will lead to direct savings on hardware resources and make backup processes more efficient.

- CommVault's proposed solution fully meets and/or exceeds these objectives as defined by City of Duluth's requirements.**

With the introduction of its fourth generation deduplication solution (Gen 4 deduplication), CommVault continues to lead the industry in delivering innovative technology that addresses pressing IT challenges. We have fully integrated **both source- and target-side deduplication** into our unified data management solution to provide best-in-class performance to dramatically reduce time-to-backup and the impact on your overall IT environment. Additionally, when deduplication is not appropriate, CommVault allows you to selectively disable it.

Source-side deduplication eliminates redundant backup and archive data at the client before sending it across networks, servers, and storage. Users can easily extend deduplication reduction globally, across thousands of clients having different retention requirements. This all adds up to shorter backup

windows, lower management costs, and more robust, reliable data protection. Typical benefits of our Gen 4 deduplication capabilities include:

- ✓ **Cut your backup window by finishing jobs faster.**
 - CommVault customers report that backup times are reduced by more than 50% after deploying source-side deduplication.
- ✓ **Transfer 90% less data across the network.**
 - Average deduplication rates, along with compression, ensure that minimum amounts of data transfer across the network.
- ✓ **Maximize data reduction by deduplicating data globally across thousands of clients in different locations with different protection policies.**
 - As future phases of data protection for remote sites and laptops are addressed, Simpana's global deduplication features will allow for those servers to be easily protected without need for additional bandwidth expense. Operationally, this is a simple extension to the data center and is all configured through the same GUI.
- ✓ **Scale out easily and cost effectively with open systems hardware.**
 - City of Duluth can use storage from any vendor to serve as backup target disk. This avoids expensive appliance hardware lock-in and greatly reduces overall cost of ownership. Additional benefit is gained within the second data center. Simpana DASH Copies (moving backup sets from site A to site B in deduplicated format) allow for the use of heterogeneous storage arrays, along with unique alternate site B retentions. This allows you to leverage low cost disk for DR copies, DR retention as required (without impacting primary retention), and again avoids expensive appliance lock-in.
- ✓ **Deduplicate into the cloud to reduce retention costs.**
 - Some or all data can be directly stored in deduplicated format to cloud providers for long-term retention.
- ✓ **Works with small and large data sets in remote offices and large data centers.**
 - The Simpana single platform approach enables a true global deduplication capability from any source. This enables City of Duluth to expand out as necessary while taking advantage of existing deduped, stored data blocks, resulting in lower data center storage costs as well as WAN upgrade cost avoidance.
- ✓ **Simple management - use a simple check box to switch between source- and target-side deduplication to meet business needs.**
 - Deduplication is easily administered from a single interface. This reduces training costs and speeds time-to-value.

5.3 Integration with Storage Arrays

City of Duluth Requirements / Objectives

Demonstrate how the solution can leverage array side data availability features such as storage snapshots. If the vendor has replication/snapshot functionality in software, demonstrate how it is more efficient than what we have (and have already paid for) in hardware.

CommVault's proposed solution fully meets and/or exceeds these objectives as defined by City of Duluth's requirements.

Hardware array-based snapshots have become the go-to method for enhancing RPO's and RTO's. They provide a solution for dealing with the effects of massive data growth coupled with the acceleration of virtualization and cloud computing that have overwhelmed traditional backup methods.

However, native array snapshot tools have varying degrees of functionality, automation and application awareness. This limits the ability of organizations to realize the full potential of snapshots and adds administrative complexity – especially in heterogeneous storage environments. Bridging this data protection gap requires integrated, intuitive options for rapid recovery of applications, systems, VMs and data.

Simpana has support for 15 major arrays, including the NetApp models listed in the RFP documentation. This rich support matrix extends the value of Simpana in the enterprise, allowing the customer to commoditize their storage investment and apply the full power of Simpana to virtually any storage platform that may be in use today or tomorrow. By interfacing directly with the array's API or its vendor-supplied control software, Simpana alleviates the need for personnel to manually configure error-prone scripts for creation and deletion of snapshots. Simpana will use policies and schedules to automatically quiesce hosts, create snapshots, retain or release snapshots, and even provide cataloged and indexed backup operations from those snapshots, on or off-host (proxy). Furthermore, with proper permissions in place, snapshots can be reverted (at the array level), mounted to the same or different host for browse-in-place recovery, or a browse and restore granular recovery from the snapshot can be effected directly from the Simpana interface.

Simpana IntelliSnap delivers the following capabilities to simplify and protect your environments:

- ✓ Near instant, consistent, application-aware backups to eliminate the backup window.
- ✓ Transparent integration with native storage array-based snapshot backups, managed from a single GUI using a consistent set of policies.
- ✓ Application consistent and validated recovery copies allow rapid and reliable recovery thus reducing end-user impact in case of downtime or disaster.
- ✓ Built-in multi-tier approach (including tape) for near-instant backup, and fast granular recovery direct from any tier, with minimal impact on production system.
- ✓ Automated, policy-based aging of data across successive storage tiers.

- ✓ Minimize downtime with application-aware, point-in-time recovery of Microsoft Exchange Server, SharePoint, SQL, Oracle, DB2, VMware, Hyper-V and other business critical applications.
- ✓ Manage hardware snapshots and backup from a single pane of glass.
- ✓ Leverage the industry's widest storage-array compatibility without scripting, including: NetApp, EMC, HDS, Dell EqualLogic, Dell Compellent, HP, IBM, Nimble, Sun, and more.
- ✓ Reduce primary storage costs with automated snapshot backup to any disk target, tape device, or even the cloud for cost-effective retention.

5.4 Capabilities across Multiple Backup Targets

City of Duluth Requirements / Objectives
 Backup architecture is changing. Vendor should demonstrate capabilities to function with our current backup targets (such as a tape library or a disk array) but also provide information on its support for a wide variety of targets – tape, disk, and emerging cloud options. Also demonstrate how the software can manage backup across a primary, secondary, and tertiary chain (disk to tape, disk to disk, disk to disk to tape, disk to disk to cloud).

CommVault's proposed solution fully meets and/or exceeds these objectives as defined by City of Duluth's requirements.

Simpana supports a broad range of backup targets and formats, including current and previous versions of LTO.

Supported target device types include: Disk (NAS, SAN, DAS), Tape, VTL, and Cloud. These types can be mixed and matched as needed for the City of Duluth environment to meet retention and cost targets. We give specific guidelines in the **Architectural Map** section. An online matrix of devices can be found here:

<http://services.commvault.com/Support/CompatibilityMatrices>

Regarding backup to disk, Simpana's ability to leverage storage is unmatched. Literally any disk that can be seen from a MediaAgent (data mover) can be used as a backup target. Simpana's embedded deduplication ability turns even the most basic disk into a deduplication target.

Simpana's concept of storage policies makes it very simple to cascade backups from disk-to-disk-to-tape-to-cloud. A storage policy maps data from its first copy to other physical media or disk locations. Part of a storage policy definition is where copies live and its associated retention. Client content is simply pointed to a storage policy, which in turn defines all copies, locations, and retentions, with no further configuration or administration. For Cloud copies, MediaAgent servers have an embedded ability to speak to cloud storage via the secure HTTP/REST API providing City of Duluth simple integration to cloud storage vendors such as Microsoft Azure, Amazon S3, AT&T, Caringo, Dell, EMC, HDS, Nirvanix, OpenStack, and Rackspace. In addition, data moved between any of these tiers can be

both encrypted and deduped, resulting in high efficiency and required encryption for compliance. These abilities enable simple datacenter-to-datacenter (or datacenter-to-cloud) movement of backup data, efficiently and securely.

Cloud-based solutions are transforming IT by reducing costs, increasing flexibility and improving time to delivery of applications and services. Take advantage of these benefits by seamlessly extending backup, archive or disaster recovery capabilities to a tier of cloud-based storage with Simpana.

Whether you are deploying an internal private cloud, leveraging services from a public cloud provider, or even looking to offer cloud-based services of your own, Simpana is optimized for cloud-based service delivery, incorporating industry-leading capabilities such as:

- ✓ Broad public and private cloud platform coverage via a built-in and secure HTTP/REST interface.
- ✓ Multi-tenancy controls that are built directly into the Simpana policy engine.
- ✓ Secure and customizable end-user access controls.
- ✓ Policy-based services that enable delivery of customizable (Gold/Silver/Bronze style) data management and protection levels.
- ✓ Access to security, reporting, data verification and data efficiencies like global, source-side deduplication and encryption features embedded in the Simpana platform.

5.5 Support for Multiple Platforms

City of Duluth Requirements / Objectives

Our infrastructure is heterogeneous. Solution must be certified to support Windows Server 2003, 2008, 2008 R2, 2012, and Linux.

- CommVault's proposed solution fully meets and/or exceeds these objectives as defined by City of Duluth's requirements.**

Microsoft Windows

Simpana completely protects Windows servers, allowing for bare-metal recovery (1-Touch), System State, volume and file-level recovery. Supported Windows versions include: Windows XP and Vista, Server 2003, Server 2008, Server 2008 R2, Server 2012, and Windows 7 and 8. CommVault OnePass data collection (leveraging a single scan for potentially multiple data management functions) and source-side deduplication ensure minimal impact to the server, network and backup windows. Critical servers can also leverage IntelliSnap to automate storage arrays for fast RPO/RTO and off-host backups. Legacy (Windows NT 4 and Windows 2000) servers can be protected as "image-level" VM backups using the Simpana Virtual Server Agent (VSA). **NOTE: There are two Windows 2000 servers in your environment which can be easily be converted(P2V) and backed up.**

Linux

We support a broad range of Linux flavors including: Debian, Fedora, Gentoo, Mandriva, OpenSuse, Oracle Linux, Red Flag, RHEL/Centos, Scientific Linux, Ubuntu, and Z-Linux. Bare metal recovery (1-Touch) is supported on Oracle Linux, RHEL, and Suse.

5.6 Restore Granularity

City of Duluth Requirements / Objectives

Demonstrate the breadth of restore granularity in the proposed solution. For example, how is the restore of a single document in a SharePoint data store managed? Another example is how to restore a single user's Exchange mailbox?

- CommVault's proposed solution fully meets and/or exceeds these objectives as defined by City of Duluth's requirements.**

Simpana allows for granular backup and recovery of all data types under management, including:

- ✓ SharePoint documents (including different versions).
- ✓ SharePoint sites and subsites.
- ✓ Exchange individual e-mail messages.
- ✓ Exchange individual public folder items.
- ✓ Exchange complete user mailboxes.

Additionally, CommVault includes an optional **Outlook Add-In** for end-users to perform self-service browse, find, and restore of their own e-mail messages from backup or archive. This Outlook Add-In can be launched directly from the end-user's Outlook client or via a Java-based Web URL.

All protected Exchange and SharePoint granular data can be **archived** and **content indexed** for eDiscovery, using the optional Content Indexing & eDiscovery module add-on.

5.7 Application Awareness

City of Duluth Requirements / Objectives

Given our major applications noted above, is there application specific awareness in the solution to cater to the peculiar requirements for executing efficient backups and restore for these applications including files that are open or in use at the time of backup.

- CommVault's proposed solution fully meets and/or exceeds these objectives as defined by City of Duluth's requirements.**

CommVault Simpana is built from the ground up on a single platform and unified code base for integrated data and information management. All functions share the same DNA and back-end technologies to deliver the unparalleled advantages and benefits of a truly holistic approach to protecting, managing and accessing data. Simpana has specific integration with: Active Directory, DB2, DB2 DPF, Documentum, Informix, Oracle, SAP, VMware, Microsoft Exchange, Microsoft SharePoint, Microsoft SQL Server, Microsoft Hyper-V, MySQL, PostgreSQL, Sybase, IBM DB2, and IBM Lotus Notes. This integration extends not just to servers hosting applications, but also to the storage array hosting its data. IntelliSnap, along with our application agents, coordinate all operations needed to quiesce, flush, snap, and catalog, providing the ability for City of Duluth to provide SLA's as needed, where needed, all from a single platform.

Regardless of what challenges you solve today by deploying Simpana, you actually get the entire platform, ready to conquer new challenges as they emerge. Simpana does the jobs of many point-level products, only better, more cost effectively, and much more simply. Your data becomes a protected, well-managed, easily accessible information asset that delivers real value back to your business.

5.8 Usability/Manageability

City of Duluth Requirements / Objectives

Reduction of management time and effort is an important component of our strategy. Demonstrate the management console for the solution showing how usability is balanced with robust capabilities.

- CommVault's proposed solution fully meets and/or exceeds these objectives as defined by City of Duluth's requirements.**

The Java/web-based management console for Simpana is designed with efficiency of operations in mind. Extensive reporting and alerting are designed to improve the usability and manageability of large enterprise environments based on exception-based policies, allowing customers to focus on deviations from accepted norms or defined standards. SNMP traps and alerts can be issued to a central NOC for automatic handling or playbook operations by first-level support. Additionally, Simpana offers an Android & Apple iOS app that provides quick access to the master server to view, manage, and monitor jobs on your smart device.

Simpana's simplified Capacity Licensing model is a paradigm shift for large enterprises. Rather than licensing individual modules (which adds additional staff workload to audit licenses and perform annual true-ups), or billing based on the amount of data protected on the back-end storage (which can multiply a customer's costs exponentially when business requirements change and dictate legal holds or additional copies be retained), Simpana's licensing model is streamlined and easily managed. Capacity is licensed based on **FRONT-END (source system) data** to be protected, and is independent of the number of copies retained. This allows the customer control of backup costs by clearly defining backup content. For example, were a customer to define a system to only protect the 10GB of important application data on a 100GB host, and needed to keep three copies (one on disk, one on tape, and one replicated to disk at a DR site), Simpana would only consume 10GB of licensing capacity. Products that charge based on the amount of source system disk size and copies retained would consume 300GB or more.

City of Duluth will appreciate the ability to group computers into multiple categories (in many-to-many relationships) called "Client Computer Groups" further simplifying role-based security, reporting, and system administration. Using Client Computer Groups, entire sets of servers can be automatically configured for updates, firewall rules, or other policy settings. These same groups can be used to restrict user access rights for operations, for reporting purposes, or control operations (such as putting a group of servers on "holiday" during a known remote site maintenance event).

Simpana also includes an expansive suite of command-line capabilities—nearly anything that can be performed through the graphical interface is also available via credential-based command line utilities, allowing for powerful automation, scripting, and event-based resolution or logging.

Integrated download of software updates from CommVault's servers or a customer cache, and push installation of agents and updates can be performed directly from the interface, increasing staff efficiency by preventing the need to login to thousands of servers to install software remotely.

5.9 Broader Data Management

City of Duluth Requirements / Objectives

Show how the solution fits into a broader data management system, including activities such as archiving (short-term and long-term), indexing, storage resource management, and e-discovery. Show capability to manage data to comply with data retention policies.

CommVault's proposed solution fully meets and/or exceeds these objectives as defined by City of Duluth's requirements.

The value of CommVault's approach to data management starts with the industry's broadest coverage of data-source integration including file systems, NAS filers, messaging applications, collaboration

platforms, database systems, desktops/laptops, and more. All of these are managed from a single console, and policy-driven rules automate the collection, indexing, deduplication, protection, and search of that data into the Simpana ContentStore—an intelligent virtual repository spanning one or more disparate storage platforms—that provides an efficient and scalable foundation for business requirements like Retention, Tiering, Search and e-Discovery, Analytics, Access and more.

With Simpana's single distributed index covering all managed data, silos of data are eliminated, increasing storage efficiency and usefulness of data within the enterprise—data can be leveraged in multiple ways now and in the future. Because ContentStore is a *virtual* repository, it can be built on almost any disk, tape, or cloud storage device, or combination thereof, with automatic tiering of data: Storage policies can automate movement of data to lower cost storage to reduce TCO throughout the lifecycle of the data. And, because Simpana is built on a single software platform, advanced features and functionality like storage resource management, deduplication, content indexing, encryption, and enterprise reporting are holistically applied across the enterprise—with one product and one console.

How does this broader unified data management strategy benefit City of Duluth? Simpana reduces complexity and operating costs; consolidates, streamlines and automates processes; extends hardware investments and improves utilization; and creates usable and valuable information from your data assets.

Our customers relate to us that implementing Simpana has helped their IT organizations deliver cost and risk reductions back to the business units, cut storage costs, reduced manpower and overhead by leveraging a single console for one unified data management solution, one method of retention and access, and one way to manage the lifecycle of their information. Simpana allows you to balance long term retention requirements with bottom line economics, to understand, retain and retrieve the “right” information (and nothing more), and control the lifecycle of the information from inception to defensible deletion.

Leveraging Simpana allows an organization to collect and manage data from multiple sources, and gain insight into new and emerging trends related to that data, ultimately boosting the value of that information and allowing you to make more informed, competitive, and cost-effective decisions.

6.0 CommVault Solution: Technical Specifications

6.1 Architectural Map

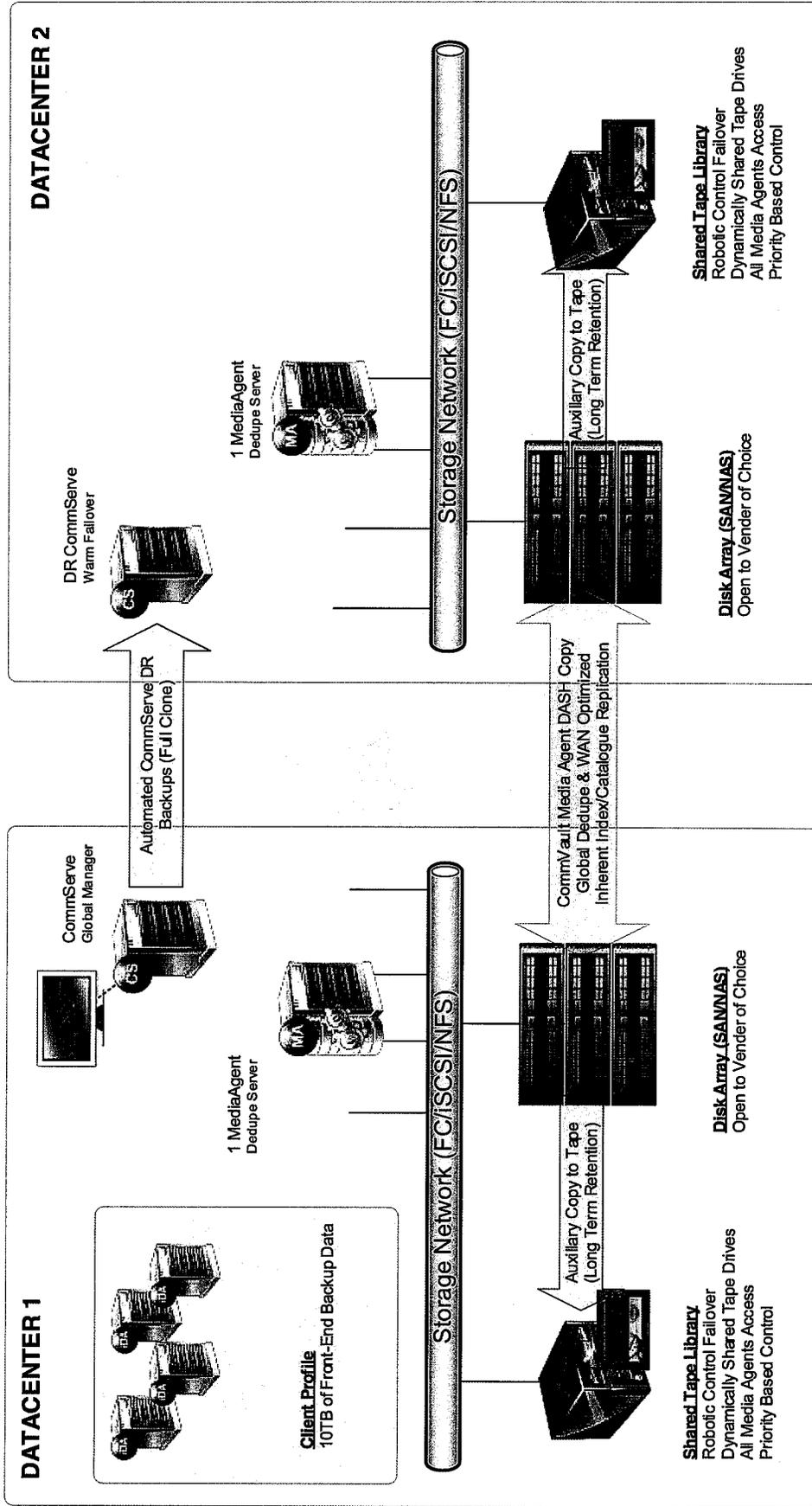
CommVault Simpana's architecture is very powerful yet very simple. The (4) primary modular components are:

- ✓ **CommServe:** This is the "master server," controlling the entire CommVault infrastructure (known collectively as the "**CommCell**").
 - The CommServe component can be installed on a physical machine or a virtual machine, as desired.
 - The CommServe includes a fully licensed copy of SQL Server Enterprise, provided by CommVault.
 - The CommServe stores high-level metadata about backup jobs and data under management in its SQL database known as the "CommServe Database." This database stays very small, never exceeding 5 GB in size for even the largest environment.
 - The CommServe can be clustered with Microsoft Clustering, or protected by VMware HA, for high availability.
 - The CommServe database is automatically backed up to at least (2) different destinations.

- ✓ **MediaAgent:** This is the "data mover," pulling and pushing data between client machines and destination target devices (disk, tape, cloud, etc.).
 - CommCells may contain anywhere from one to dozens of MediaAgents, depending on the size of the environment and backup performance requirements.
 - In small environments, the CommServe and MediaAgent can be co-located on the same machine.
 - The MediaAgent contains the "Deduplication Database," which is used for global deduplication.
 - The MediaAgent manages the "Index," which is the complete catalog of all backed up files, folders, and objects. Multiple copies of the Index are stored for high availability.
 - MediaAgents can be physical or virtual, but in most cases a physical MediaAgent is preferable for a variety of reasons, such as performance, availability, and supportability (especially when using tape libraries, VTLs, etc.).

- ✓ **Media:** CommVault supports almost any type of media you can attach to the MediaAgent, including:
 - Disk
 - Direct-Attached (SAS)
 - SAN (iSCSI/FC)
 - NAS (CIFS/NFS)
 - Tape Library
 - VTL
 - Cloud

- ✓ **iDataAgent (iDA):** This is the backup and archive agent installed on a computer being backed up or archived. Various iDAs are available for different file systems and applications:
 - Windows File System
 - Linux/Unix File System
 - Mac OS File System
 - VMware ESXi 4.x/5.x
 - Hyper-V 2008 R2/2012
 - Exchange 2003/2007/2010/2013
 - SQL 2005/2008/2008 R2/2012
 - SharePoint 3.0/2007/2010/2013
 - Active Directory 2003/2008/2008 R2/2012
 - MySQL
 - Oracle
 - Lotus Notes
 - SAP
 - Sybase
 - and many others...



6.2 Server Capacity Recommendation

CommVault capacity sizing is based on a simple concept known as a “Building Block.” A Building Block is a combination of server and storage, which provides a modular approach for CommVault data management. Each Building Block can handle **up to 60 TB** of “before dedupe” backup data and **up to 120 TB** of “after dedupe” backup data, if the hardware is sized appropriately. A CommCell can contain one or multiple Building Blocks, as needed for scalability. Building Block nodes are available in several sizes, depending on the specific hardware components installed in the physical server. The various Building Block sizes are:

Building Block Node Size	Front-End Data	Back-End Data
Extra Small	Up to 10 TB	Up to 15 TB
Small	Up to 20 TB	Up to 30 TB
Medium	Up to 30 TB	Up to 60 TB
Large	Up to 40 TB	Up to 90 TB
Extra Large	Up to 60 TB	Up to 120 TB

Based on City of Duluth’s “before dedupe” backup set size of **10 TB**, Emergent Networks is recommending (1) “Small” Building Block configuration, to accommodate a potential doubling in data set size over the next several years. The MediaAgent component, and optionally the CommServe component, will be installed onto this physical Building Block node. This “Small” Building Block node is configured as follows:

(2)HP ProLiant DL380p Gen8 E5-2665 2P 32GB-R P420i SFF 750W PS High Perf Server (642105-xx1)

Each Includes:

- (2) Intel Xeon E5-2665 (2.4GHz/8-core) Processors
- 32 GB RAM
- HP Dual-Port 10GbE 530FLR-SFP+ Adapter
 - **NOTE:** Must purchase optical SFPs separately if not using copper (twinax).
- (2) Power supplies

Additional:

- HP Dual-Port 10GbE 530SFP+ PCI Adapter for connectivity to iSCSI storage solution
 - **NOTE:** Must purchase optical SFPs separately if not using copper (twinax).
- HBA for connectivity to IBM LTO4 tape library
- Optional 8 SFF SAS Expander (total of 16 SFF SAS drive bays)
- (14) 300GB 6G SAS 15K SFF (2.5”) Enterprise Hard Drives
 - (2) in RAID 1 for OS/Program Files/Page File

- (2) in RAID 1 for CommServe Database (if CommServe installed with MediaAgent)
- (4) in RAID 10 for Deduplication Database
- (5) in RAID 5 for Index Cache
- (1) Hot Spare
- Windows Server 2008 R2 Standard or Enterprise Edition

DR Consideration:

- Emergent Networks recommends ordering an identical Building Block for the second data center to serve as a DR/replication target. CommVault includes built-in replication capabilities to ensure only the deduplicated data is transmitted to the remote site.

6.3 Storage Capacity Recommendation

CommVault global deduplication is extremely efficient, typically resulting in 90%+ data size reduction across all backup jobs. Exceptions to this rule include pre-compressed data, pre-encrypted data, analog image files, video files, and other data types that do not deduplicate very effectively. Additionally, a retention period of 30 days will require substantially less disk space than a retention period of 7 years, for example. The daily change rate, combined with the retention period, for each data type can be calculated to determine approximate “after dedupe” storage requirements.

According to the City of Duluth RFP, retention periods will vary from 90 days for most backups to up to 7 years for certain “archives.” Emergent Networks will need to analyze these data sets in more detail, and discuss what is envisioned for archiving, prior to arriving at a final storage configuration.

In lieu of specific data set and retention details, a storage configuration maximizing the Building Block’s capacity (**30 TB of back-end storage**) would look something like this:

(2)EMC VNXe 3150 (for backup and archive data)

- iSCSI Storage Array
- Dual Controllers
- 10 GbE Connectivity
- (50) 900 GB 2.5” (SFF) 10K Drives
- Storage configured in (7) 6+1 RAID 5 Groups plus hot spare.
- Usable capacity will be around **33 TB usable**.

DR Consideration:

- Emergent Networks recommends ordering an identical storage target for the second data center to serve as a DR/replication target. CommVault includes built-in replication capabilities to ensure only the deduplicated data is transmitted to the remote site.

NOTE: The server and storage hardware recommended here may not be the preference of City of Duluth. These are presented as an option. CommVault supports almost all storage and server platforms. If the client wants us to configure a different solution we would be happy to accommodate.

7.0 CommVault Solution: Operations & Support

7.1 Implementation Support

City of Duluth Requirements / Objectives

Provides complete turnkey onsite implementation and project management support.

- CommVault's proposed solution fully meets and/or exceeds these objectives as defined by City of Duluth's requirements.**

Emergent Networks Professional Services will provide on-site implementation and project management support. Our CommVault engineers have been implementing CommVault solutions since 2005 exclusively in the Minnesota region. Our engineers are CommVault certified and work closely with the CommVault local and national engineering teams. Emergent Networks engineers will work hand-in-hand with City of Duluth engineers to deliver a turn-key solution, implementing HP servers, EMC storage, and CommVault Simpana data management software. Professional documentation will be provided at the conclusion of the implementation, and ongoing support and knowledge transfer assistance will be provided as much as desired by City of Duluth. Emergent Networks is a local Minnesota company with a desire to form long-lasting customer relationships. Your engineers and our engineers will develop a relationship that will continue past the last day of the implementation.

7.2 Customer Support

City of Duluth Requirements / Objectives

Provides toll free customer support 24 hours, seven days per week. Provide documentation of response and resolution times (including optional levels).

- CommVault's proposed solution fully meets and/or exceeds these objectives as defined by City of Duluth's requirements.**

CommVault provides toll-free access to customer support 24 hours a day, seven days per week. CommVault's Customer Support Services options help you make the most of your investment in the CommVault software suite. Our premium support services are a key differentiator between us and our competitors, and we continually invest in support, support systems, and support enhanced services. Support is managed with a global mission statement that all customers must be very satisfied in each survey response 80% of the time or more. This objective is part of each engineer's compensation plan. Currently, CommVault Customer Support maintains a 95% customer satisfaction rating based on this internal requirement. You also get access to a variety of other services that are valuable throughout the life of your products:

Product Updates / Upgrades

- ✓ Maximize performance with the latest versions of your licensed products
- ✓ Service Pack, Maintenance Pack, and Hot Fix availability
- ✓ New update notifications through the Support Notification Service

Online Services

- ✓ Access to the CommVault eSupport Portal with features specifically designed for our Support customers
- ✓ Online Knowledge Base for easy access to solutions
- ✓ Online Forum for real time discussion with CommVault experts and CommVault end users
- ✓ Online documentation and FAQs for each product
- ✓ Notification of changes in open support service requests
- ✓ Telephone access to skilled engineers
- ✓ Support that is available 24/7, whenever a problem may occur
- ✓ Unlimited number of calls to CommVault Customer Support
- ✓ Regular updates on the status of open cases
- ✓ Support engineers who are certified with high-skill security qualifications
- ✓ Remote debugging and re-configuration tools for rapid fault resolution

Other Features

- ✓ Product Upgrade Validation Automation Tools
- ✓ CommVault Support Log Upload Management
- ✓ Product Compatibility and Interoperability Matrices
- ✓ CommVault ROMS portal

Premium Support

The Premium Support package is designed to address mission critical environments since it provides a comprehensive 24x7 coverage period. This package includes:

- ✓ Around-the-clock access to the CommVault Technical Assistance Center (including holidays)
- ✓ 24x7 access to the Maintenance Advantage self-help website

- ✓ Notification of critical software updates product enhancements and new releases (when available)
- ✓ Web E-Support such as Incident Management, Knowledge Database, CommVault Books Online and the CommVault Forums
- ✓ Reports provided upon request

7.3 Training

City of Duluth Requirements / Objectives
 Provides onsite training to technicians. Curriculum and duration should be detailed.

CommVault’s proposed solution fully meets and/or exceeds these objectives as defined by City of Duluth’s requirements.

CommVault Training Services provides classroom, self-paced eLearning and onsite alternatives to ensure an optimized operation of the City of Duluth CommVault environment.

CommVault recommends that City of Duluth leverage a combination of both online and classroom (including on-site) training.

CommVault onsite training is customer-focused to address specific needs allowing the flexibility to focus content and instructor interaction. Any instructor led course, or combination of the CommVault Administration course with any specialty course, may be delivered over a five day period. This training process optimizes customer team interaction and information retention. Onsite training courses are provided for up to 18 attendees (all attendees must be from the same company.)

The content of the classwork would be customized to City of Duluth specifications.

System Admin Training Tracks

There are several education tracks available for City of Duluth technology professionals.

If you are a CommVault System Administrator, we have exciting news. CommVault Educational Services presents three System Admin Training Track Options. Depending on your role and responsibilities as a System Administrator, we have defined fast-path road maps to competency, proficiency, certification and expertise in the CommVault Simpana portfolio.

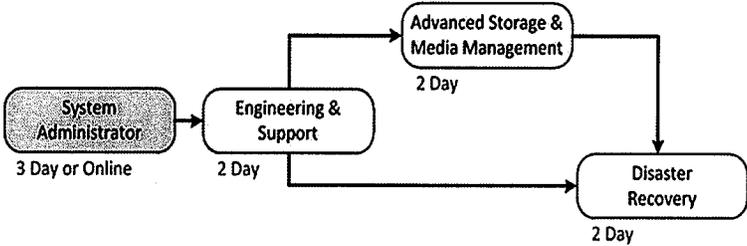
If you are a:	Training Track we recommend:
Subject Matter Expert	Solution Professional
Principal System Administrator	Functional Specialist

Member of the Operations Team	Product Specialist
--------------------------------------	---------------------------

Best Practices Recommended Training Tracks

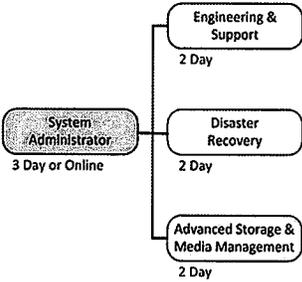
Solution Professional

Build upon the System Administrator Course foundation with the Engineering and Support Course. Achieve optimal component mastery in one of the Instructor Led Advanced Courses of Engineering & Support, Disaster Recovery, or Advanced Storage & Media Management.



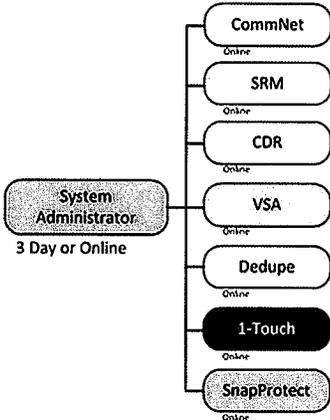
Functional Specialist

Gain greater return on your investment through optimal product efficiencies and significantly reduced outages caused by misunderstood configuration errors. Continue essential knowledge growth in Engineering & Support, Disaster Recovery, or Advanced Storage & Media Management.



Product Specialist

Ensure your Operations team is minimally prepared for the breadth and scope of utility that CommVault Simpana brings. The bedrock of the CommVault System Administrator course is most enabled by the follow-on E-Learning program. E-Learning modules enhance skills in CommNet, SRM, CDR, Virtual Server Agent, Deduplication, 1-Touch, and IntelliSnap.



7.4 Software Updates

City of Duluth Requirements / Objectives

Provides future software releases and updates to all applications as part of regular software maintenance fees.

- CommVault's proposed solution fully meets and/or exceeds these objectives as defined by City of Duluth's requirements.**

Software Maintenance includes upgrades to future releases and updates to all Simpana modules. Upgrades to new versions of CommVault are provided regularly and seamlessly to the CommServe (master server), MediaAgents, and iDataAgents. With our releases, most agents do not require any downtime or reboots for install or updates. iDataAgents are supported two versions back, giving City of Duluth the flexibility to upgrade the clients in phases. Periodically, there are updates to various CommVault components, and these updates can be scheduled to be automatically downloaded from the CommServe. Updates themselves can be pushed out automatically or manually.

Simpana uses a push installation method straight from the GUI for its software modules that need to be installed throughout the production environment. In this manner, installations and upgrades can be accomplished without user intervention and with minimal or no impact on the receiving systems. The product offers silent installs through the use of answer files for remote and network push installation. In addition, all software updates and patches are available on the Web via the CommVault Maintenance Advantage site. They can also be set to automatically download via the CommCell Console. Our release schedule for "major" software updates is approximately every 24 months.

7.5 Technical Documentation

City of Duluth Requirements / Objectives

Provides technical documentation for support staff including system overviews, design, flowcharts, and file layouts.

- CommVault's proposed solution fully meets and/or exceeds these objectives as defined by City of Duluth's requirements.**

The recommended, site-specific, CommVault application architecture will be provided by CommVault and will include the CommServe, MediaAgents, storage libraries, and iDataAgents throughout the City of Duluth enterprise. Full documentation including system overviews, design, flowcharts, and file layouts will be provided.

CommVault also has a feature in our Maintenance Advantage portal called CommVault Forums, which is an opt-in free service where customers can post, search, and collaborate on Simpana best practices. Currently, over 8,000 of our more than 18,000 customers actively use this site.

7.6 User Manuals

City of Duluth Requirements / Objectives

Provides complete set of user manuals for all software applications to document and explain system features and functions.

- CommVault's proposed solution fully meets and/or exceeds these objectives as defined by City of Duluth's requirements.**

Our technical portal, Books Online, contains detailed information on Simpana, including installation, tools, popular features, a How-to section, and white papers. Books Online is accessible at the following location:

http://documentation.commvault.com/commvault/release_10_0_0/books_online_1/default.htm

8.0 Vendor Qualifications & References

With a 95% customer satisfaction ranking, CommVault has a wide variety of reference customers from which to draw upon. Those customers that have formally agreed to be a part of our reference customer program have asked that their contact information and some of their environment and deployment details not be included as part of RFP responses.

The following customers are willing to speak with you and provide details around their environment and experience with CommVault's Simpana solution. Please contact your account executive if you wish to connect with any of them.

Reference #1

Organization Name	Bremer Bank
Industry	Finance
Contact Name and Title	Tom Matlack, Infrastructure Manager
Phone Number	(651)734-4578
E-mail Address	trmatlack@bremer.com
Number of users	25TB of data, 2,000 employees
Product name and version number	Simpana 9.0 (Displaced IBM TSM)
Installation time frame	
Go-Live date	Fall 2012
Number of client business staff involved	1
Number of client IT staff involved	4
Number of supplier staff	2

Reference #2

Organization Name	BI Worldwide
Industry	Business Incentives
Contact Name and Title	Brian Nieman, Infrastructure Manager
Phone Number	952-844-4827
E-mail Address	nieman@biworldwide.com
Number of users	25 TB of data 400 users
Product name and version number	Simpana 9.0(displaced EMC Networker)
Installation time frame	Spring 2012
Go-Live date	Summer 2012
Number of client business staff involved	2
Number of client IT staff involved	4
Number of supplier staff	2

Reference #3

Organization Name	Hopkins School District
Industry	Education
Contact Name and Title	John Wetter, IT Manager
Phone Number	952-988-5373
E-mail Address	John.Wetter@hopkinsschools.org
Number of Users	25TB,
Product name and version number	Simpana 9.0 (Backup Exec)
Installation time frame	
Go-Live date	Summer 2012
Number of client business staff involved	2
Number of client IT staff involved	3
Number of supplier staff	2

9.0 Five Year Total Cost Summary(Original-Pricing Detail is current)

Five Year Total Cost Summary						
Costs	Total	Year 1	Year 2	Year 3	Year 4	Year 5
Total Licensing of Product	\$58,800	\$58,800				
Hardware Cost						
(2) HP DL380 servers needed to support CommServe	\$39,945	\$36,912	N/A	N/A	\$1,494*** *	\$1,539*** *
“Optional” Storage for backup to disk(two arrays-30TB each))	\$113,615	\$92,860*	N/A	N/A	\$10,224**	\$10,531.**
OS Licensing (If required for product)						
Documentation & Training(Included in installation)						
SW Maintenance for CommVault	\$89,803	\$17,640	\$17,640	\$17,400	\$18,169	\$18,714
Installation	\$23,400	\$23,400				
Integration						
Project Management(part of installation)						
Miscellaneous						
Travel & Expenses-Other (specify)	\$2,500***	\$2,500***				
Total:	\$328,063 !	\$232,112 !	\$17,640	\$17,400	\$29,887	\$30,784

*Storage price includes three years of 24 hour x 7 day support for hardware and software.

**Estimated support costs for storage for years 4 and 5

***Estimated Travel and Expenses. Will be billed at actual cost.

****Estimated Year 4 and 5 HP server support 24 x 7 with iLO

! Includes option for additional storage.

Pricing Detail:

CommVault Licensing and support:

12TB of capacity Licensing with 12 months premium support	\$54,000.00
60 months Premium support(24 x 7 phone support with updates)	\$74,844.00

HP Servers:

Quantity 2: Price: \$39,945.00

- DL380p Gen 8 32GB of memory
- (2) Intel Xeon E5-2665 (2.4GHz/8-core) Processors
- HP Dual port 10GbE Adapter
- HP 4-port 1Gb adapter
- HP dual port 10GbE Adapter
- (14) 300GB 15K SAS drives
- HP Dual Port 8Gb Dual Port FC HBA(DR side for tape)
- Dual power supplies
- Five year 24 x 7 x 4 hour support

Storage Options:

Option 1:

EMC VNXe Storage Arrays Price: \$111,050.00

(2)EMC VNXe 3150 (for backup and archive data)

- iSCSI Storage Array
- Dual Controllers
- 10 GbE Connectivity

- (50) 900 GB 2.5" (SFF) 10K Drives
- Storage configured in (7) 6+1 RAID 5 Groups plus hot spare.
- Usable capacity will be around 33 TB usable.
- Five Year 24 hour x 7 support

Or

Implementation Services:

Per SOW	Price:	\$23,400.00
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Estimated travel expenses: (billed at actual)	Price:	\$2,500.00
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TOTAL (with VNXe storage option):		\$305,739.00
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10.0 Vendor Certification



City of Duluth
Management Information Systems

411 West First Street • Room 210a • Duluth, Minnesota • 55802
218-730-5170 • Fax 218-730-5916 • www.duluthmn.gov

An Equal Opportunity Employer

7 Vendor Certification

This certification attests to the vendor's awareness and agreement to the content of this RFP and all accompanying calendar schedules and provisions contained herein.

The vendor must ensure that the following certificate is duly completed and correctly executed by an authorized officer of your company.

This proposal is submitted in response to Request for Proposal for Enterprise Backup Solution issued by the City of Duluth. The undersigned is a duly authorized officer, hereby certifies that:

Emergent Networks LLC

(Vendor Name)

agrees to be bound by the content of this proposal and agrees to comply with the terms, conditions, and provisions of the referenced RFP and any addenda thereto in the event of an award. Exceptions are to be noted as stated in the RFP. The proposal shall remain in effect for a period of 90 calendar days as of the Due Date of the RFP.

The undersigned further certify that their firm (check one):

- IS
- IS NOT

currently debarred, suspended, or proposed for debarment by any federal entity. The undersigned agree to notify the City of Duluth of any change in this status, should one occur, until such time as an award has been made under this procurement action.

Person(s) authorized to negotiate on behalf of this firm for the purposes of this RFP are:

Name: Tom Larsson Title: General Manager

Signature: [Signature] Date: 6/19/13

Name: _____ Title: _____

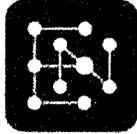
Signature: _____ Date: _____

Signature of Authorized Officer:

Name: Gary Anderson Title: CEO

Signature: [Signature] Date: 6/19/13

Exhibit C
Statement of Work



Emergent Networks

Barry Bates
Account Executive, Sales
Phone (612) 213-2543
BarryB@emergentnetworks.com

Preliminary
CommVault Implementation Project
Statement of Work

Prepared For:



**411 West First Street
Duluth, MN 55802**

August 9, 2013

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1 Document Control Sheet

General Information

Project Name CommVault Implementation	Project Manager Brian Kantar	Key Business Sponsor Elysia Hoium	Emergent Single POC Brian Kantar
--	--	---	--

Document Preparation Information

Author Brian Kantar	Date August 5, 2013	Organization Name Emergent Networks
Phone Number (612) 213-2563	E-Mail briank@emergentnetworks.com	

Project Contacts

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Bill Oyler	Emergent Networks	Billo@emergentnetworks.com	612-213-2558
Brian Kantar	Emergent Networks	Briank@emergentnetworks.com	612- 213-2563
Barry Bates	Emergent Networks	Barryb@emergentnetworks.com	612-213-2543

Change History

Version	Date	Change Description	Approved By
1.0	8/5/13	Original document creation.	BK

2 Background

City of Duluth's backup server is currently running the application ArcServe v16 on Windows Server 2003. There is one additional backup server at a WAN site running the application ArcServe v12 on Windows Server 2003. There are 75 servers on a scheduled backup rotation and this legacy solution is backing up to tape.

The following reflects the current mix of virtualization Technology:

- Server virtualization is VMware version ESX 4.1 running on CISCO UCS B200 and B250 Blades connected to a NetApp 3140 SAN. We have six hosts on two chassis running 80 guests
- CISCO UCS chassis are connected at 10Gb to the Nexus Core.
- The system was implemented in 2012
- A second data center with a UCS Stack and NetApp 3240 designated as a secondary site.
- The system is currently available 24x7x365
- The system is used corporate wide
- There are 950 users, connecting to various applications through varying connections.
- CPU utilization averages 25%
- The City of Duluth technical staff is currently responsible for maintenance, operation, availability, update, backup and support

3 Project Objectives

Supply an enterprise backup software solution to the City of Duluth with a well-defined architecture and a solution that includes a comprehensive plan for continuing service and support utilizing industry best practices.

This solution will entail the installation and configuration of the latest CommVault solution and EMC centralized storage. Each of the two storage appliances will replicate to keep backup data integrity and add a level of redundancy. The existing tape backup solution will be used for periodic data archive and may require user intervention.

4 Scope

The scope of this project includes the installation and configuration of two new HP servers, one for production and one for the remote location. EMC storage appliances will be attached to each new HP server and will be the target for the CommVault backups. Emergent Network will configure CommVault to do both an image- and data-based backup of each server listed on the client provided inventory. CommVault's capabilities will be limited to the licenses and hardware purchased in the associated proposal. This Statement of Work is directly associated with the attached signed proposal.

The overall tasks in this project include:

1. Hardware installation and configuration
2. CommVault Simpana installation and configuration
3. CommVault backup agent installation and configuration
4. CommVault IntelliSnap installation and configuration
5. Backup configuration for each server on the client provided inventory
6. On-site knowledge transfer and training for up to 3 engineers
7. Post implementation review and issue resolution

4.1 Included

Requirement	Agreed Solution
HP DL380p Gen8 Implementation	<ul style="list-style-type: none"> • Primary CommServe & Primary MediaAgent at Main Data Center • DR CommServe & DR MediaAgent at DR Site Data Center • 10 GigE connectivity to each data center's LAN • 10 GigE connectivity to shared storage device at each data center • 1 GigE connectivity between data centers for CommVault replication
Implementation of (2) EMC VNXe shared storage arrays	<ul style="list-style-type: none"> • Primary VNXe at Main Data Center • DR VNXe at DR Site Data Center
Implementation of CommVault Simpana v10 infrastructure	<ul style="list-style-type: none"> • Primary CommServe • DR CommServe • Primary MediaAgent <ul style="list-style-type: none"> ○ Most servers will backup to Primary MediaAgent • DR MediaAgent <ul style="list-style-type: none"> ○ Some servers at DR Site will backup to DR MediaAgent • CommVault Deduplication • CommVault Replication <ul style="list-style-type: none"> ○ Bi-directional • Disk Library (VNXe) configuration <ul style="list-style-type: none"> ○ 10 GigE switch-connected • Tape Library (existing customer owned) configuration <ul style="list-style-type: none"> ○ 8 Gbps FC direct-connect
Implementation of CommVault backup agents	<ul style="list-style-type: none"> • VMware Backup Agent • Windows File System Backup Agent (up to 10) • Linux File System Backup Agent (up to 10) • SQL Database Backup Agent (up to 10) • Exchange Database Backup Agent • Exchange Message-Level Backup Agent • Exchange Data Mining Tool (if desired) • Outlook Add-In for End-User Restore (if desired) • SharePoint Database Backup Agent • SharePoint Document-Level Backup Agent • Active Directory Agent
CommVault IntelliSnap	Implement CommVault IntelliSnap with NetApp integration
Knowledge Transfer and Training	Provide on-site knowledge transfer and training to up to (3) customer engineers
Post-implementation follow-up	Follow-up "tune-up" engagement to ensure entire system is running smoothly

4.2 Excluded

The following tasks/functionality/deliverables are specifically excluded from this project:

Exclusion	Description
Physical rack, stack, and transport	The physical installation, removal, or relocating of server or network hardware
Power, network, hardware, or software issues	Power, network, hardware, or software issues that are not directly related to the work performed within the scope of this document
Security, Active Directory, or Network issues	Troubleshooting or worked performed on issues related to security, Active Directory, and/or network or security policies setup in the City of Duluth environment
Legacy data, backup, disaster recovery, or related servers	The legacy backup or integrity of any data associated with City of Duluth
DR testing	DR testing is not included in this SOW
Legacy Server OS Support	Any servers with Windows 2000 or older
Exchange and SQL backup utilization	Exchange database-level backups and message-level backups will both count against CommVault capacity limit. For this reason, be sure to have sufficient licensing to allow for both types of backups. Similarly, SQL database backups could potentially be counted twice against CommVault licensing if they are also backed up as part of a VMware image-level backup. To prevent this from happening, CommVault can be configured to exclude certain VMDK files from backup.
Packing or shipping	Packing, shipping, or transport of any hardware

5 Company Commitments

This section outlines the tasks, resources, and deliverables that City of Duluth has agreed to deliver to ensure a successful project execution.

Commitment	Responsible
Provide a complete list/inventory of servers to be backed up	City of Duluth
The agreed upon capacity license for CommVault is 12TB. This capacity was requested and agreed upon by the City of Duluth and is accurate	City of Duluth
All hardware will be racked, connected, and prepared for this project	City of Duluth
Provide adequate 10 GigE and 1 GigE switch ports for connecting all	City of Duluth

equipment.	
Ethernet and Fiber patch cables as required. Emergent can provide these at an additional cost, if requested	City of Duluth
Uninstallation of existing backup software, servers, and agents	City of Duluth
Ensure ESXi hosts are running ESXi 4.1 Update 2 or later	City of Duluth
Complete pre-implementation checklist in advance of engagement	City of Duluth
Appropriate network switch ports for all primary and redundant connectivity	City of Duluth
All licensing is available, up-to-date, and accompanied by an active support agreement	City of Duluth
Successful backup of all server and data	City of Duluth
Remote access will be provided to Emergent Networks by way of an Emergent remote access agent	City of Duluth

6 Change Control

All changes that affect the scope, time, or cost of this project must be approved by the change management board listed below. Anybody on the project team can propose a change; however the business sponsor and account manager must approve all changes on the project. The project manager must manage the approval & disapproval changes and incorporate it into the project plan.

All project change requests must be accompanied by a Change of Scope form, which will be signed by both parties accepting the changes to scope, time, and cost. Any changes to the scope of this project will affect the timeline and costs associated with the project.

Change Management Board

Name	Organization	E-mail Address	Phone Number
Elysia Hoium	City of Duluth	Ehoium@duluthmn.gov	218-730-5003
Paul Collins	City of Duluth	pcollins@duluthmn.gov	218-730-5133
Bill Oyler	Emergent Networks	Billo@emergentnetworks.com	612-213-2558
Brian Kantar	Emergent Networks	Briank@emergentnetworks.com	612- 213-2563
Barry Bates	Emergent Networks	Barryb@emergentnetworks.com	612-213-2543

7 Project Reporting and Communication

Emergent Networks will provide updates to the key business contacts throughout the course of the project. The primary means of communication will be E-mail.

8 Acceptance of Statement of Work

IN WITNESS WHEREOF, the parties hereto have agreed to this Statement of Work and by signing below agree to the above Statement of Work and the Terms and Conditions of the associated Master Services Agreement, # _____ and applicable addendums associated with each related service. To be signed by their duly authorized representatives as of the date set forth below. This Statement of Work is directly associated with the attached signed proposal.

Accepted by:

Customer: City of Duluth

Emergent Networks, LLC.:

Authorized Signature
411 West First Street
Duluth, MN 55802

Date

Authorized Signature
3600 Minnesota Drive, suite 150
Edina, MN 55435

Date

Printed Name

Printed Name

Exhibit D
Goods and Services Provided by EN to Customer

- 1.1..1 Two (2) HP Servers, which shall include a minimum of
 - 1.1..1.1 DL380p Gen 8 32GB of memory
 - 1.1..1.2 Two (2) Intel Xeon E5-2665 (2.4GHz/8-core) Processors
 - 1.1..1.3 HP Dual port 10GbE Adapter
 - 1.1..1.4 HP 4-port 1Gb adapter
 - 1.1..1.5 HP dual port 10GbE Adapter
 - 1.1..1.6 Fourteen (14) 300GB 15K SAS drives
 - 1.1..1.7 HP Dual Port 8Gb Dual Port FC HBA(DR side for tape)
 - 1.1..1.8 Dual power supplies
 - 1.1..1.9 Five (5) year 24 hour, 7 day-a-week live telephone or in-person support, part replacement and firmware updates
- 1.1..2 Two (2) EMC VNXe SAN
 - 1.1..2.1 iSCSI Storage Array
 - 1.1..2.2 Dual Controllers
 - 1.1..2.3 At least 10 GbE Connectivity
 - 1.1..2.4 Fifty (50) 900 GB 2.5" (SFF) 10K Drives
 - 1.1..2.5 Storage configured in (7) 6+1 RAID 5 Groups plus "hot spare".
 - 1.1..2.6 Usable capacity will be at least 33 TB usable.
 - 1.1..2.7 Five (5) year 24 hour, 7 day-a-week live telephone or in-person support, part replacement and firmware updates
- 1.1..3 All goods and services indicated in RFP, Project, Statement of Work, and Project Proposal
- 1.1..4 CommVault Agent Software for unlimited number of Servers and Workstations;
- 1.1..5 All EMERGENT NETWORKS provided Enterprise Backup Software indicated in RFP, Project, Project Proposal, and Statement of Work
- 1.1..6 12TB Licensing for the CommVault Simpana Enterprise Edition and Modules
- 1.1..7 60 months Premium Support (24 hour, 7 day-a-week live telephone or in-person support including any updates);
- 1.1..8 Complete Implementation, installation data configuration and training of Backup System and as outlined in the in RFP, Project, Project Proposal, and Statement of Work;