

Unisys Corporation

Response To

The WV Department of Administration

RFQ No: ISCF0113

Buyer: Krista Ferrell

Bid Opening Date: 7/07/2006

Bid Opening Time: 1:30 p.m.



Unisys Corporation Telephone
North Gate Business Park 304 340 4400
290 Association Drive 304 340 4423 Fax
Charleston, WV 25311

July 6, 2006

WV Department of Administration
IS&C – Infrastructure Manager
1 Davis Square
Charleston, WV 25301

RE: RFQ ISCF0113

Dear Evaluation Committee,

Unisys Corporation is pleased to respond to ISCF0113 Request for Quote for a Computer Assisted Retrieval System (Clariion CX700 storage solution). As an EMC storage systems partner and reseller, Unisys believes its submission is responsive and meets the requirements of the Department of Administration's Request for Quote.

By submission of this response to RFQ ISCF0113 Unisys Corporation acknowledges and accepts the mandatory requirements of the RFQ in accordance with the attached Statement of Understanding, unless otherwise addressed by Unisys in response to the State's invitation.

The Unisys individual to be contacted if clarification of this response is necessary is Dave Williams at (304) 340-4422. The quoted pricing is valid for 90 days. We look forward to your evaluation of our response.

Sincerely,

Dave Williams
Portfolio Sales Executive

Lara Novino
Contracts Manager



Unisys Statement of Understanding

This response, to the WV Department of Administration's RFQ #ISCF0113, has been prepared in accordance with Unisys understanding of your requirements based on the RFQ information provided. The final determination that the proposed products and services meet your requirements must be yours.

This RFQ response contains confidential information of Unisys Corporation. In consideration of the receipt of this document and except as otherwise permitted according to the Freedom of Information Act, recipient agrees not to reproduce or make this information available in any manner to persons outside the group directly responsible for evaluation of its contents.

The Unisys products and services contained in this proposal (EMC Clariion CX700) will be supplied under the terms and conditions set forth in the Unisys - State of West Virginia Master Agreement #95010052, a copy of which is enclosed herein and on file at the West Virginia Department of Administration and the at the West Virginia Attorney General's Office. In accordance with Section 14.1 of the Unisys - State of West Virginia Master Agreement #95010052, Unisys submits the Limitation of Liability Agreement found on the next page. Client shall reference this quote on its order and include a copy of this quote and the signed Agreement for Limitation of Liability.

As indicated in the response, Unisys is applying for 2.5% vendor preference. This application is based on our understanding of the applicable checked requirement for a non resident vendor to have at least 100 employees within the State, and that, on average, at least 75% of those employees (i.e. the one hundred State residents, referenced above) have resided in the State for 2 years.

The pricing in this RFQ response is valid for 90 days unless extended by Unisys in writing.



Agreement for Limitation of Liability

West Virginia Purchase Requisition Number: ISCF0113

Description of Product/Services: EMC Clariion CX700

Total Charge(s) for Products/Services: \$ 349,088

In accordance with Section 14.1 of the West Virginia Master Agreement #95010052, the parties agree to the following limitation of liability for direct damages for the products and/or services placed on the above referenced order:

The entire liability of Unisys and Customer's exclusive remedy for damages from any cause related to or arising out of this Agreement, regardless of form or action, will not exceed the greater of (a) \$200,000 or (b) the charges paid to Unisys during the 24 month period immediately prior to Customer's notice of intent to initiate action. Such limitation of liability shall not apply to claims for personal injury, wrongful death or tangible property damage or claims under Section 15 (Patent, Copyright and Trade Secret Indemnification).

Upon execution of this Agreement by both parties, Unisys will accept and process the order for products and/or services.

Agreed and Accepted:

UNISYS CORPORATION

WV Department of Administration


(Signature)

(Signature)

Lara C. Novino
Print Name/Title
Unisys Contracts Manager

Print Name/Title

(215) 986-6614
Date

Date

7/5/06



Unisys Response

WV Department of Administration, IS&C – Infrastructure Manager

RFQ ISCF0113

Unisys Corporation acknowledges and accepts all of the mandatory requirements of the RFQ in accordance with the attached Statement of Understanding, and responds to the following sections of the RFQ which require explanation:

- Section 2.1.18 The successful vendor shall supply WVOT with a single point of contact that can be contacted by WVOT for all issues related to the installation of the equipment.

**Unisys Response: The single point of contact will be:
Gene Trindell
1-717-938-1666**

- Section 2.2.1 The successful vendor must provide an original equipment manufacturers (EMC) three year warranty for all licensed software and hardware, regardless of the manufacturer's warranties. The cost of the warranty will be included in the purchase price listed as item A on Attachment 1. Cost, if any, associated with warranty service must be indicated in the pricing tables and must include all parts, labor, hardware and software upgrades, software Help Desk services, travel, or any other expense. No separate reimbursement will be made the vendor for any expenses.

Unisys Response: A copy of the EMC warranty and software license is enclosed in this response and the cost of requested 3 year warranty is included in the purchase price listed as Item A on Attachment 1.

- Section 2.2.3 The successful vendor must also quote an additional 2 year maintenance agreement to begin after the initial (3) year warranty period to include hardware and software upgrades. This must be billed annually in arrears.

Unisys Response: Unisys has provided an additional 2 year maintenance quote to begin after the initial (3) year warranty period. As "to include hardware and software upgrades," new release levels of firmware and software, and possibly any new hardware fixes that might come about will be provided, but not any additional new hardware or software components (e.g. additional disk , etc.). With respect to billing annually in arrears, Unisys will bill monthly in arrears.

- Section 2.3.4 The system will not be accepted until all problems identified during the vendor and the Agency testing period have been resolved and the entire system has been up and running without error for 7 consecutive days. All costs for testing and implementation shall be included in the quoted hardware with installation and software with installation quote.



Unisys Response: This requirement is understood. Unisys subcontractor EMC will work with the Agency in resolving any problems identified during the testing period.

- Section 3.3.2 The vendor must define in their bid response any subcontractors who will be used to complete the requirements of this RFQ. Vendor shall include the name of the company, contact person and telephone number, type of work subcontractor will perform, and number of certified employees to perform work.

Unisys Response: Unisys Subcontractor on this bid is identified below:

Company Name: EMC

Contact Person: Tom Smith

Telephone #: 513-745-0300

Type of work to perform: EMC Customer Service Manager to Support Hardware and software installation for EMC SAN equipment

Number of Certified Employees: All EMC assigned technical resources are certified with the products to be installed

Unisys as an Authorized EMC Support Services Provider will provide hardware and software support for the CX700.



**State of West Virginia
Department of Administration, Office of Technology**

RFQ ISCF0113 "CX700" (Config ID: 144587)

Qty	Unisys Style	EMC Style	Description	Net Price
Hardware:				
1	CXU7001-DPE	CX700	EMC DISK: CX700 SPE HAW 8GB MEMORY	
1	CX40-RCK	RACK-40U-C	EMCDISK:40U COMMON RACK	
3	CXP2-JDA	CX-2PDAE	CX DAE FC 2GB EXPANSION	
1	CXP2700-UDA	CX-2PDAE-70	CX700 2G FC DAE W/FLARE	
30	CXR14610-UGF	CX-2G10-146	FC 146GB 10K 520B 2GB	
17	CXU30010-2GB	CX-2G10-300	EMCDISK:300GB FCL 10K 2GB	
1	CX40-US	PW40U-C-US	EMCDISK:40U-C PWR CORD - US	
1	CX700-DOC	CX700-KIT	EMCDISK:CX700 DOCS & RTU	
1	CX6001-CUS	C-MODEM-US	EMCDISK:CLARIION SERVICE MODEM-US	
1	NS502-GFD	NS502G-FD	2 DM NS500 GTWY FLD INST	
1	NS1-CSF	NS-CSFD	EMCDISK:CS FALCON SRVR FLD INST	
2	NS1-MIA	NS-MIA	EMC DISK:HSSDC TO FIBRE CONVERTER FOR	
1	NAS100-US	MODEM-US	UNITED STATES MODEM	
16	CLR60-30	FM-LL30MD	EMCDISK:30M MM FIBRE CABLE LC-LC	
2	EC1100-LKT	DSB2RLKT	EMCDISK:RAILS FOR SYMM DS8B2	
2	EC4100-00	DS-4100B-00	EMC DISK: BRCD 32-PORTS W/16 ACTIVE	
2	EC4100-8U	DS4100B-8U-00	EMC DISK: BRCD 8-PORT UPGRADE	

Software:				
1	CXN357-WGR	NAV-WGKIT	EMC SW: NAVI WORKGROUP MEDIA	OTC
1	CXN600-INK	NAVAGT-WINKIT	EMC SW: NAVI AGENT WINDOWS MEDIA	OTC
1	CXN700-WRK	NAV700-WG	EMC SW: CX700 NAVI WORKGROUP	OTC
1	CLR100-STD	SE-CLAR-STDS	EMC SW: FOR SMI-S SUPPORT	OTC
1	NS500-CLR	NS5-C-DCD	EMC SW: DOC & CD: NS500+CLAR	OTC
1	NAS1-MGR	NAS-MGR-L	EMC SW: MANAGER ADVANCED EDITION	OTC
1	NS2-DCD	NS-ISCSI-DCD	EMC SW:CELERRA ISCSI APP DCD	OTC
1	NS502-GIF	NS502G-CIFS-L	EMC SW:NS500 CIFS LICENSE	OTC
1	NS500-CIL	NS5-IS-CI-L	EMC SW:NS500 ISCSI WITH CIFS LIC	OTC

Services:			
1	INS1-DSC	PS-EXP-DSC	PS: DUAL DEPT SWITCH INSTALL
1	*INS1-BSC	PS-CUS-PRDSVC	EMC Custom Services

Total H/W, S/W, & Services		\$ 238,368
Local Delivery Charge		206
Total		\$ 238,574

Maintenance:

Maintenance Level (HW and SW): 24x7 4 Hour Response for 5 years

Hardware Support: 24x7 coverage, 4 hour response

Software Support: 24x7 coverage

Years 1 - 3		\$ 38,482
Cost Sheet Box A		\$ 277,056
Years 4 - 5		72,032
Cost Sheet Box B		72,032
Total Bid Including 5 Year Maintenance		\$ 349,088
Cost Sheet Box A + Box B		\$ 349,088

* OTC = One Time Charge License

**West Virginia
Department of Administration
Information Services & Communications**

PS-CUS-PRDSCR

INS1-DSC

Statement of Work

NAS Installation Services

Prepared by:

Unisys Corporation

290 Association Drive

Charleston, WV 25311

UNISYS
imagine it. done.

**WV IS&C Client Executive: David Williams
Practice Manager: Gene Trindell**

Date: 07/06/2006

Unisys Corporation (Unisys) presents this proposed Statement of Work (SOW) to you in confidence to solicit an offer from you to Unisys to buy the services described in this SOW. This SOW is not a contract or an offer to contract. By your receipt of this SOW, you are not obligated to make an offer to Unisys to buy any services. Prior to contract the information contained herein is subject to change without notice. Revisions may be issued to advise of such changes and/or additions. Unisys may accept any offer you choose to make. Only a written offer accepted (and signed) by an authorized Unisys representative will create any Unisys obligations arising from, or related to, this SOW or any service described in this SOW.

NO WARRANTIES OF ANY NATURE ARE EXTENDED BY THE DOCUMENT. Any product and related materials disclosed herein are only furnished pursuant and subject to the terms and conditions of a duly executed license or agreement to purchase or lease equipment. The only warranties made by Unisys, if any, with respect to the products described in this document are set forth in such license or agreement. Unisys cannot accept any financial or other responsibility that may be the result of your use of the information in this document or software material, including damages of any kind.

The information contained herein is subject to change without notice. Revisions may be issued to advise of such changes and/or additions.

Unisys is a registered trademark of Unisys Corporation

Proprietary Notice

This document contains confidential information of Unisys Corporation. In consideration of the receipt of this document, recipient agrees not to reproduce or make this information available in any manner to persons outside the group directly responsible for the evaluation of its contents, except as may be required by applicable public access law and/or regulation.

Table of Contents

1	<i>Client Details</i>	4
2	<i>Introduction</i>	4
3	<i>Project Scope</i>	4
3.1	<i>Out of Scope</i>	6
4	<i>Resource Engagement Guidelines</i>	7
5	<i>Terms and Conditions</i>	7
5.1	<i>Fees and Invoicing</i>	7
5.2	<i>WV IS&C Obligations</i>	9
5.3	<i>Mutual Responsibilities</i>	9
5.4	<i>Location</i>	10
5.5	<i>Change in Scope</i>	10

1 Client Details

West Virginia Department of Administration
IS&C – Infrastructure Manager
1 Davis Square
Charleston, WV 25301

Contact: first last, title
Phone: (304) 558-1360
E-mail:

2 Introduction

This Statement of Work (“SOW”) describes the terms under which the State of West Virginia, Department of Administration, Information Services and Communications (“The Client” or “WV IS&C”) has engaged Unisys Corp to provide project consulting and implementation services.

The overall view of this SOW describes the implementation of an EMC NS502G connected to a CX700 storage array at the WV IS&C data center facility. This SOW cover two line item styles. The INS1-DSC style covers the implementation and configuration of the SAN into EMC Connetrix switches. The second style PS-CUS-PRDSVC provides for the implementation and connection of the NS502G to the CX700 storage array.

3 Project Scope

The project duration is expected to be less than week. This project’s objective is to provide WV IS&C with the following:

- Project meeting to verify environment and operational implementation requirements are met.
- Plan and Integration of (1) NS502G with (2) data movers to (1) existing EMC Storage Array (CLARiiON or DMX) and existing SAN.
- Back-end configuration of (1) EMC CX700 Storage Array to enable NAS access.
- Installation of latest NAS software and operating system (DART) on primary control station and data movers.
- Implement and zone up to two EMC Connetrix Switches
- Configure one network interface on primary control station.
- Configure default gateway routing on primary control station.
- Configure failover relationship for Primary and Standby Data Movers.

- Configure up to (6) virtual network devices (FSN or TRK) on primary data mover.
- Configure up to (6) Network interfaces for the primary data mover.
- Configure default gateway routing on primary data mover.
- Configure (1) DNS domain on primary data mover.
- Configure Network Time Protocol on primary data mover.
- Configure up to (12) file systems.
- Configure CIFS file access protocol.
- Configure Internal Usermapper service on primary data mover.
- Implement up to (6) Celerra CIFS servers validated within a single Windows Domain.
- Configure up to (12) CIFS shares.
- Configure up to (12) SnapSure checkpoint schedules.
- Configure up to 1 iSCSI Connection for a supported Windows Server host
- Integrate with (1) Backup Solution (NDMP or LAN).
- Test user access from CIFS clients.
- Test primary and standby data mover network interfaces.
- Test primary data mover failover

Project Management

- Deliver project management leadership for all project tasks pertaining to this engagement.
- Plan and Schedule engagement's installation and configuration tasks
- Gather data relevant to and required for the EMC infrastructure being deployed.
- Risk assessment planning throughout the project lifecycle.
- Verify hardware and software requirements are met.
- The Project Manager will be responsible for directing Unisys and EMC resources, WV IS&C will assign a resource to coordinate WV IS&C efforts related to this project.
- Conduct meetings as necessary, gathering information needed to verify the configuration design and implementation meet WV IS&C IT infrastructure and business requirements.

3.1 Out of Scope

Unisys is responsible to perform the Implementation Services described in this Statement of Work. Services outside the scope include, but are not limited to the following:

- FTP, NFS protocols.
- Configuration of Filesystem Quotas.
- FileMover configuration.
- Write Once Read Many (WORM) configuration.
- Celerra Anti-Virus Agent (CAVA).
- Celerra Replicator.
- SRDF Replication.
- Virtual Datamovers (VDM's).
- TimeFinder/FS configuration.
- SNMP Events and Notifications configuration.
- NAS Access Control Lists (ACL's).
- Data Migrations.
- Configuration of the SAN and storage arrays

4 Summary of Deliverables

- Implementation Plan
- Fully installed NS502G with (2) data movers connected to (1) existing EMC Storage Array (CLARiiON or DMX) and existing SAN.
- Configuration Guide
- Functional Overview

5 Resource Engagement Guidelines

The following are the guidelines for the staffing under this *Statement of Work*.

- Work effort on this SOW will take place during the standard work week..
- A standard work week will consist of: Monday through Friday, 8 hours per day, 5 days per week (40 hours per week). Days or hours outside of the standard work week schedule can be accommodated, but the End-user must request this in writing at least 10 days prior to the need. Additional charges at the contracted rate may be incurred if this work day (s) is not offset by a day off during the normal work week. If the actual work week consistently or frequently deviates from the "standard" work week discussed, a Change in Scope will need to be reviewed by all Parties for modification to this SOW.

6 Terms and Conditions

The services contained in this Statement of Work will be supplied under the terms and conditions set forth in the Unisys - State of West Virginia Master Agreement #95010052, a copy of which is on file at the West Virginia Department of Administration and at the West Virginia Attorney General's Office, and the attached Agreement for Limitation of Liability and Third Party Products. Client shall reference and sign the attached Agreement for Limitation of Liability and Third Party Products.

6.1 Fees and Invoicing

The consulting services will be provided on a fixed price basis for this engagement. Expenses are NOT included in this fee.

Table 1. Billing

<i>Milestone / Event</i>	<i>WV IS&C Price</i>
PS-CUS-PRDSVC	\$19,635.00
INS1-DSC	\$11,840.00
<i>Total</i>	\$31,205.00

At the time Unisys has, in its reasonable opinion, fulfilled the services in accordance with this Statement of Work, Unisys shall send WV IS&C a written notice of completion that requests a written response from WV IS&C.

WV IS&C shall have five (5) calendar days from receipt of such notice in which to respond that (i) Unisys has completed the services in accordance with this SOW; or (ii) Unisys has not so complied and the specific basis for such noncompliance. If WV IS&C indicates noncompliance, the parties shall promptly meet and use good faith to resolve difficulties.

If WV IS&C indicates compliance, or does not respond. If Unisys indicates compliance, or does not respond within such seven (7) day period, the Consulting Services shall be deemed to be accepted.

Payment is due in accordance with the terms of the West Virginia Master Contract.

The results, accuracy, and contents of Unisys services are dependent upon the content and accuracy of information provided by WV IS&C. Once a schedule has been mutually agreed upon, Unisys shall make reasonable efforts to accommodate changes requested by WV IS&C.

WV IS&C shall send the Unisys Project Manager notice of postponements or delays at least ten (10) business days in advance of the scheduled event. If Unisys is not reasonably able to "work-around" the postponement or delay, especially in instances where the consulting and implementation services require participation by WV IS&C personnel that become unavailable, Unisys is authorized to charge WV IS&C for time lost and additional expenses incurred due to such delays or postponements at Unisys' current hourly rates.

6.2 WV IS&C Obligations

WV IS&C shall afford Unisys access to WV IS&C staff at various times in the project but Unisys is also aware that WV IS&C's staff is dedicated to the daily operations of the facilities. Unisys shall make every reasonable effort to limit the demands on these people but WV IS&C contacts may have critical knowledge of the operations and the business itself. This knowledge must be made available to Unisys in a timely fashion, and is invaluable to the project's success. In support of this project, WV IS&C shall:

- Assign a Project Sponsor as the single point of contact for issue resolution, activity scheduling, interview scheduling, and information collection and dissemination. The Project Sponsor is responsible to ensure compliance with WV IS&C's obligations.
- Provide at least one (1) technical contact with system administration responsibilities and appropriate levels of access privileges to systems and information necessary to perform this service.
- Make any system maintenance window available for Unisys (or authorized agents) as needed to prepare equipment.
- Provide access to WV IS&C's systems and network as necessary to perform the consulting and implementation services during normal business hours, or at mutually agreed upon timeframes.
- Respond to Unisys requests that WV IS&C resources work on issues and tasks not directly stated in this Statement of Work, but have a direct impact on the successful completion of this project.
- Provide support from technical support teams for all vendors and third parties as necessary.
- Review and comment on all deliverables provided by Unisys.
- Provide network connectivity and access, and assume all responsibility for network performance and network configuration issues.
- Verify the equipment location (work site) is ready to perform the consulting and implementation services.
- Ensure fully configured server(s) running the required operating system versions (including patches) as documented in the product guide are available to ensure successful project completion.
- WVIS is solely responsible for and shall back up all data/databases. Unisys will not be responsible loss or damage to data/databases from any cause.
- Conform to the *EMC Product Support Matrix* requirements (server, NICs, HBAs, software, etc.), as directed by the Unisys Services Implementation Specialist.
- Provide Unisys with sufficient access to WV IS&C's business resources to create/develop the design documentation.

6.3 Mutual Responsibilities

In support of this effort, both Unisys and WV IS&C shall:

- Conduct project review meetings at a mutually agreed upon time and location to discuss the project status, issues, new requirements, and overall project satisfaction.
- Support and provide representation at these meetings, which will review performance status update, schedule update, pending changes, open issues and action items.

- Support Project Issue and Tracking Resolution, by using the *EMC Project Issue Report* to track and review issues.
- Coordinate any change to this *Statement of Work* (whether cost impacting or not) with WV IS&C's Project Sponsor in accordance with the *EMC Project Change Request Form* supplied in a separate document.
- Collaborate to adjust project schedules and re-deploy resources in an expeditious manner in the event of schedule delays beyond the control of either party.
- Meet at the project conclusion in person or via telephone to bring project closure and capture, discuss, and/or resolve any project issues that may have arisen since the implementation hand-off occurred.

6.4 Location

The Consulting Services shall be performed primarily at the WV IS&C office in Charleston, WV. However, Unisys shall have the option of performing appropriate portions at Unisys or EMC facilities in the U.S..

6.5 Change in Scope

Any deviation or change in the scope of the consulting and implementation services must be approved by WV IS&C or an authorized designee thereof.

The Unisys Primary Contact has overall responsibility for the change process. When a change is desired, the requestor (Unisys or WV IS&C) notifies the Unisys Primary Contact who performs the following:

- Prepares a preliminary *Project Change Request Form* to identify the nature of the requested change.
- Acknowledges receipt of the Change Request.
- Performs an initial Impact Assessment to determine the effect, if any, on the consulting and implementation service's schedule and the costs associated utilizing resources to perform a full Change Request analysis. If the Impact Assessment indicates using resources to analyze the Change Request affects the consulting and implementation services schedule or costs, Unisys shall obtain WV IS&C approval before performing the Change Request analysis.
- Reports the Change Request status in the Progress Reports.

If WV IS&C approves a full Change Request analysis, Unisys shall prepare a *Project Change Request Form* detailing the change and its justification for the change, directing the analysis effort to the appropriate resources. This analysis shall result in a final *Project Change Request Form* containing estimated cost, schedule and resource requirements, technical feasibility, and recommended disposition such as:

- Implement without adjusting current cost or delivery schedule.
- Implement with impact to the WV IS&C cost or delivery schedule.
- Recommended as a follow-on project.
- If Unisys finds the project not technically or economically feasible, an explanation will be provided detailing the reason.

Unisys reviews the *Project Change Request Form* with WV IS&C and it is marked as "accepted" or "withdrawn," and signed by both parties. If "accepted", consulting and implementation services are revised to include the agreed change(s) and the invoicing process is appropriately modified.



State of West Virginia
 Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

Request for Quotation

RFQ NUMBER
 ISCF0113

PAGE
 1

ADDRESS CORRESPONDENCE TO ATTENTION OF
 KRISTA FERRELL
 304-558-2596

*709025203 02 304-340-4400
 UNISYS CORP
 NORTH GATE BUSINESS PARK
 290 ASSOCIATION DRIVE
 CHARLESTON WV 25311

V
E
N
D
O
R

S
H
I
P
T
O

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
06/27/2006				

BID OPENING DATE: 07/07/2006 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	LS		205-20		
<p>COMPUTER ASSISTED RETRIEVAL SYSTEMS</p> <p>REQUEST FOR QUOTATION</p> <p>THE WEST VIRGINIA PURCHASING DIVISION ON BEHALF OF THE AGENCY, THE WEST VIRGINIA DEPARTMENT OF ADMINISTRATION'S OFFICE OF TECHNOLOGY, IS SOLICITING BIDS TO PROVIDE AND INSTALL A CLARION CX700 STORAGE SOLUTION IN THE OFFICE OF TECHNOLOGY LOCATED AT ONE DAVIS SQUARE IN CHARLESTON, WEST VIRGINIA PER THE ATTACHED SPECIFICATIONS.</p> <p>BANKRUPTCY: IN THE EVENT THE VENDOR/CONTRACTOR FILES FOR BANKRUPTCY PROTECTION, THIS CONTRACT IS AUTOMATICALLY NULL AND VOID, AND IS TERMINATED WITHOUT FURTHER ORDER.</p> <p>VENDOR PREFERENCE CERTIFICATE</p> <p>CERTIFICATION AND APPLICATION* IS HEREBY MADE FOR PREFERENCE IN ACCORDANCE WITH WEST VIRGINIA CODE, 5A-3-37 (DOES NOT APPLY TO CONSTRUCTION CONTRACTS).</p> <p>A. APPLICATION IS MADE FOR 2.5% PREFERENCE FOR THE REASON CHECKED:</p> <p>() BIDDER IS AN INDIVIDUAL RESIDENT VENDOR AND HAS RESIDED CONTINUOUSLY IN WEST VIRGINIA FOR FOUR (4) YEARS IMMEDIATELY PRECEDING THE DATE OF THIS CERTIFICATION; OR</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>Dara Chourmou</i>	TELEPHONE 215 986 6614	DATE 7/5/06
TITLE <i>Contracts manager</i>	FEN 38-038 7840	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

**GENERAL TERMS & CONDITIONS
REQUEST FOR QUOTATION (RFQ) AND REQUEST FOR PROPOSAL (RFP)**

1. Awards will be made in the best interest of the State of West Virginia.
2. The State may accept or reject in part, or in whole, any bid.
3. All quotations are governed by the *West Virginia Code* and the *Legislative Rules* of the Purchasing Division.
4. Prior to any award, the apparent successful vendor must be properly registered with the Purchasing Division and have paid the required \$125.00 registration fee.
5. All services performed or goods delivered under State Purchase Orders/Contracts are to be continued for the term of the Purchase Order/Contract, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise available for these services or goods, this Purchase Order/Contract becomes void and of no effect after June 30.
6. Payment may only be made after the delivery and acceptance of goods or services.
7. Interest may be paid for late payment in accordance with the *West Virginia Code*.
8. Vendor preference will be granted upon written request in accordance with the *West Virginia Code*.
9. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
10. The Director of Purchasing may cancel any Purchase Order/Contract upon 30 days written notice to the seller.
11. The laws of the State of West Virginia and the *Legislative Rules* of the Purchasing Division shall govern all rights and duties under the Contract, including without limitation the validity of this Purchase Order/Contract.
12. Any reference to automatic renewal is hereby deleted. The Contract may be renewed only upon mutual written agreement of the parties.
13. **BANKRUPTCY:** In the event the vendor/contractor files for bankruptcy protection, this contract is automatically null and void, and is terminated without further order.
14. **HIPAA Business Associate Addendum** - The West Virginia State Government HIPAA Business Associate Addendum (BAA), approved by the Attorney General, and available online at the Purchasing Division's web site (<http://www.state.wv.us/admin/purchase/vrc/hipaa.htm>) is hereby made part of the agreement. Provided that, the Agency meets the definition of a Covered Entity (45 CFR §160.103) and will be disclosing Protected Health Information (45 CFR §160.103) to the vendor.

INSTRUCTIONS TO BIDDERS

1. Use the quotation forms provided by the Purchasing Division.
2. **SPECIFICATIONS:** Items offered must be in compliance with the specifications. Any deviation from the specifications must be clearly indicated by the bidder. Alternates offered by the bidder as **EQUAL** to the specifications must be clearly defined. A bidder offering an alternate should attach complete specifications and literature to the bid. The Purchasing Division may waive minor deviations to specifications.
3. Complete all sections of the quotation form.
4. Unit prices shall prevail in cases of discrepancy.
5. All quotations are considered F.O.B. destination unless alternate shipping terms are clearly identified in the quotation.
6. **BID SUBMISSION:** All quotations must be delivered by the bidder to the office listed below prior to the date and time of the bid opening. Failure of the bidder to deliver the quotations on time will result in bid disqualifications.

SIGNED BID TO:

Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130



State of West Virginia
 Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

Request for Quotation

RFQ NUMBER
 ISCF0113

PAGE
 2

ADDRESS CORRESPONDENCE TO ATTENTION OF
 KRISTA FERRELL
 304-558-2596

*709025203 02 304-340-4400
 UNISYS CORP
 NORTH GATE BUSINESS PARK
 290 ASSOCIATION DRIVE
 CHARLESTON WV 25311

VENDOR

SHIP TO

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
06/27/2006				

BID OPENING DATE: 07/07/2006 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
<p>() BIDDER IS A PARTNERSHIP, ASSOCIATION OR CORPORATION RESIDENT VENDOR AND HAS MAINTAINED ITS HEAD-QUARTERS OR PRINCIPAL PLACE OF BUSINESS CONTINUOUSLY IN WEST VIRGINIA FOR FOUR (4) YEARS IMMEDIATELY PRECEDING THE DATE OF THIS CERTIFICATION; OR 80% OF THE OWNERSHIP INTEREST OF BIDDER IS HELD BY ANOTHER INDIVIDUAL, PARTNERSHIP, ASSOCIATION OR CORPORATION RESIDENT VENDOR WHO HAS MAINTAINED ITS HEADQUARTERS OR PRINCIPAL PLACE OF BUSINESS CONTINUOUSLY IN WEST VIRGINIA FOR FOUR (4) YEARS IMMEDIATELY PRECEDING THE DATE OF THIS CERTIFICATION; OR</p> <p>() BIDDER IS A CORPORATION NONRESIDENT VENDOR WHICH HAS AN AFFILIATE OR SUBSIDIARY WHICH EMPLOYS A MINIMUM OF ONE HUNDRED STATE RESIDENTS AND WHICH HAS MAINTAINED ITS HEADQUARTERS OR PRINCIPAL PLACE OF BUSINESS WITHIN WEST VIRGINIA CONTINUOUSLY FOR THE FOUR (4) YEARS IMMEDIATELY PRECEDING THE DATE OF THIS CERTIFICATION.</p> <p>B. APPLICATION IS MADE FOR 2.5% PREFERENCE FOR THE REASON CHECKED:</p> <p>() BIDDER IS A RESIDENT VENDOR WHO CERTIFIES THAT, DURING THE LIFE OF THE CONTRACT, ON AVERAGE AT LEAST 75% OF THE EMPLOYEES WORKING ON THE PROJECT BEING BID ARE RESIDENTS OF WEST VIRGINIA WHO HAVE RESIDED IN THE STATE CONTINUOUSLY FOR THE TWO YEARS IMMEDIATELY PRECEDING SUBMISSION OF THIS BID;</p> <p>OR</p> <p>(<input checked="" type="checkbox"/>) BIDDER IS A NONRESIDENT VENDOR EMPLOYING A MINIMUM OF ONE HUNDRED STATE RESIDENTS OR IS A NONRESIDENT VENDOR WITH AN AFFILIATE OR SUBSIDIARY WHICH MAINTAINS ITS HEADQUARTERS OR PRINCIPAL PLACE OF BUSINESS WITHIN WEST VIRGINIA EMPLOYING A MINIMUM</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>Lara Churno</i>	TELEPHONE 215 986 6614	DATE 4/5/06
TITLE <i>Contract Manager</i>	FEIN 38-038 4840	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'



State of West Virginia
 Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

Request for Quotation

RFQ NUMBER
 ISCF0113

PAGE
 3

ADDRESS CORRESPONDENCE TO ATTENTION OF
 KRISTA FERRELL
 304-558-2596

*709025203 02 304-340-4400
 UNISYS CORP
 NORTH GATE BUSINESS PARK
 290 ASSOCIATION DRIVE
 CHARLESTON WV 25311

V
E
N
D
O
R

S
H
I
P
T
O

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
06/27/2006				

BID OPENING DATE: 07/07/2006 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
<p>OF ONE HUNDRED STATE RESIDENTS WHO CERTIFIES THAT, DURING THE LIFE OF THE CONTRACT, ON AVERAGE AT LEAST 75% OF THE EMPLOYEES OR BIDDERS' AFFILIATE'S OR SUBSIDIARY'S EMPLOYEES ARE RESIDENTS OF WEST VIRGINIA WHO HAVE RESIDED IN THE STATE CONTINUOUSLY FOR THE TWO YEARS IMMEDIATELY PRECEDING SUBMISSION OF THIS BID.</p> <p>BIDDER UNDERSTANDS IF THE SECRETARY OF TAX & REVENUE DETERMINES THAT A BIDDER RECEIVING PREFERENCE HAS FAILED TO CONTINUE TO MEET THE REQUIREMENTS FOR SUCH PREFERENCE, THE SECRETARY MAY ORDER THE DIRECTOR OF PURCHASING TO: (A) RESCIND THE CONTRACT OR PURCHASE ORDER ISSUED; OR (B) ASSESS A PENALTY AGAINST SUCH BIDDER IN AN AMOUNT NOT TO EXCEED 5% OF THE BID AMOUNT AND THAT SUCH PENALTY WILL BE PAID TO THE CONTRACTING AGENCY OR DEDUCTED FROM ANY UNPAID BALANCE ON THE CONTRACT OR PURCHASE ORDER.</p> <p>BY SUBMISSION OF THIS CERTIFICATE, BIDDER AGREES TO DISCLOSE ANY REASONABLY REQUESTED INFORMATION TO THE PURCHASING DIVISION AND AUTHORIZES THE DEPARTMENT OF TAX AND REVENUE TO DISCLOSE TO THE DIRECTOR OF PURCHASING APPROPRIATE INFORMATION VERIFYING THAT BIDDER HAS PAID THE REQUIRED BUSINESS TAXES, PROVIDED THAT SUCH INFORMATION DOES NOT CONTAIN THE AMOUNTS OF TAXES PAID NOR ANY OTHER INFORMATION DEEMED BY THE TAX COMMISSIONER TO BE CONFIDENTIAL.</p> <p>UNDER PENALTY OF LAW FOR FALSE SWEARING (WEST VIRGINIA CODE 61-5-3), BIDDER HEREBY CERTIFIES THAT THIS CERTIFICATE IS TRUE AND ACCURATE IN ALL RESPECTS; AND THAT IF A CONTRACT IS ISSUED TO BIDDER AND IF ANYTHING CONTAINED WITHIN THIS CERTIFICATE CHANGES DURING THE TERM OF THE CONTRACT, BIDDER WILL NOTIFY THE PURCHASING DIVISION IN WRITING IMMEDIATELY.</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>Yara Chavino</i>	TELEPHONE 25986 6614	DATE 7/5/06
TITLE <i>Contract Manager</i>	FEIN 38-038 7840	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'



State of West Virginia
 Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

Request for Quotation

RFQ NUMBER
 ISCF0113

PAGE
 4

ADDRESS CORRESPONDENCE TO ATTENTION OF
 KRISTA FERRELL
 304-558-2596

*709025203 02 304-340-4400
 UNISYS CORP
 NORTH GATE BUSINESS PARK
 290 ASSOCIATION DRIVE
 CHARLESTON WV 25311

V
E
N
D
O
R

S
H
I
P
T
O

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
06/27/2006				

BID OPENING DATE: 07/07/2006 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
<p>BIDDER: <u>Unisys Corporation</u></p> <p>DATE: <u>7/5/06</u></p> <p>SIGNED: <u>Lara C. Morano</u></p> <p>TITLE: <u>Contracts Manager</u></p> <p>* CHECK ANY COMBINATION OF PREFERENCE CONSIDERATION(S) IN EITHER "A" OR "B", OR BOTH "A" AND "B" WHICH YOU ARE ENTITLED TO RECEIVE. YOU MAY REQUEST UP TO THE MAXIMUM 5% PREFERENCE FOR BOTH "A" AND "B". (REV. 12/00)</p> <p>NOTICE</p> <p>AN ORIGINAL, SIGNED BID MUST BE SUBMITTED TO:</p> <p>DEPARTMENT OF ADMINISTRATION PURCHASING DIVISION BUILDING 15 2019 WASHINGTON STREET, EAST CHARLESTON, WV 25305-0130</p> <p>THE BID SHOULD CONTAIN THIS INFORMATION ON THE FACE OF THE ENVELOPE OR THE BID MAY NOT BE CONSIDERED:</p> <p>SEALED BID</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <u>Lara C. Morano</u>	TELEPHONE <u>2159866614</u>	DATE <u>7/5/06</u>
TITLE <u>Contracts Manager</u>	FEIN <u>38-0384840</u>	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'



State of West Virginia
 Department of Administration
 Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

Request for Quotation

RFQ NUMBER
 ISCF0113

PAGE
 5

ADDRESS CORRESPONDENCE TO ATTENTION OF
 KRISTA FERRELL
 304-558-2596

*709025203 02 304-340-4400
 UNISYS CORP
 NORTH GATE BUSINESS PARK
 290 ASSOCIATION DRIVE
 CHARLESTON WV 25311

VENDOR

SHIP TO

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
06/27/2006				

BID OPENING DATE: 07/07/2006 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
BUYER: 21 RFQ. NO.: ISCF0113 BID OPENING DATE: 07/07/2006 BID OPENING TIME: 1:30 PM PLEASE PROVIDE A FAX NUMBER IN CASE IT IS NECESSARY TO CONTACT YOU REGARDING YOUR BID: ----- 304-340-4423 ----- CONTACT PERSON (PLEASE PRINT CLEARLY): ----- Dave Williams ----- ***** THIS IS THE END OF RFQ ISCF0113 ***** TOTAL: \$ 349,088.00						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>[Signature]</i>	TELEPHONE 215 986 6614	DATE 7/5/06
TITLE Contracts manager	FAX 304-338 7840	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

REQUEST FOR QUOTATION STATE OF WEST VIRGINIA

WV Office of Technology

The Purchasing Division of the WV Department of Administration, for the WV Office of Technology (WVOT), is requesting quotations from qualified vendors for the purchase, along with a 36-month warranty contract, provision inclusive of travel or any other expense, for the implementation of a Clarion CX700. No separate reimbursement will be made to the vendor for travel or any other expense. Quotations must include ALL costs associated with the implementation of the requested storage system; this must include materials, professional services, personnel travel, and any other costs associated with this project.

All specifications are mandatory unless otherwise indicated and the award shall be based on the lowest bid meeting specifications. Vendors are to complete the attached Bid Sheets.

DESCRIPTION OF SERVICES REQUESTED

1. GENERAL INFORMATION

1.1 Overview of Request

The purpose of this Request for Quotation is to provide needed storage for the Office of Technology's server consolidation site. Complete installation and implementation services are included as part of this RFQ.

1.2 Current Environment

WVOT currently has 3 Windows 2003 servers in a Windows Active Directory in the server consolidation environment. WVOT does not have storage in the server consolidation site.

2. PROCUREMENT SPECIFICATIONS

2.1 Scope of Work:

The WV Office of Technology intends to acquire a storage solution with the capability to perform, at a minimum, the following functions:

2.1.1 The equipment provided in this RFQ will provide a SAN to WVOT with 30 146 G and 17 300 G drives. The equipment list includes configuration and management software needed for configuring LUNs, and ensuring that data security is assured as well as the infrastructure needed to support connectivity for 1 Windows host via Fiber Channel Cards and 1 Windows host via NAS and 1 Windows host via iSCSI.

2.1.2 The SAN and NAS storage solutions shall provide for centralized and consolidated storage for SAN and NAS data application purposes. The proposed solution must be a Tier 1 solution and in the Gartner Magic Quadrant for SAN

REQUEST FOR QUOTATION
WV Office of Technology

- and NAS solutions. The state will not accept proposals that have less than all stated requirements for storage and other capabilities.
- 2.1.3 The NAS solution must provide a control station with a management interface. The control station will present the SAN disk as NAS storage to hosts. The NAS solution must have redundant management connections to each data mover via serial and 10/100 interface and must manage data mover failover. The NAS File serving virus protection must be client-based real-time or host based scheduled scans of file shares. It must provide on-demand anti-virus support through tight integration with Symantec and must provide the ability to offload real-time scanning from NAS file services solution to limit impact of anti-virus solution on proposed NAS file server. The NAS device shall not be susceptible to NT/2000/2003 type viruses. (i.e. buffer overflow, etc...)
- 2.1.4 Dual-pathing for hosts is not required at this time.
- 2.1.5 The backup capability of the solution shall provide the ability to back up data through a TSM client on Windows operating systems.
- 2.1.6 The system must be a turn-key operation where the successful vendor provides all software necessary to provide the features and functionality specified in this RFQ.
- 2.1.7 The successful vendor will be responsible for the coordination of any and all subcontractors necessary to implement the storage solution and will be the single point of contact.
- 2.1.8 The successful vendor must provide all necessary documentation needed to fully operate the storage solution.
- 2.1.9 At a minimum the system must contain the following Clariion CX700 parts:

QTY	Item Number	Description
	CX700 with 7TB usable SYSTEM	CX700 PSI
1	RACK-40U-C	40U COMMON RACK
3	CX-2PDAE	CX DAE FC 2GB EXPANSION
1	CX-2PDAE-70	CX700 2G FC DAE W/FLARE
30	CX-2G10-146	FC 146GB 10K 520B 2GB
17	CX-2G10-300	300GB FCL 10K 2GB
1	PW40U-C-US	40U-C PWR CORD - US
1	CX700-KIT	CX700 DOCS & RTU
1	C-MODEM-US	CLARIION SERVICE MODEM-US
1	NAV-WGKIT	NAVI WORKGROUP MEDIA
1	NAVAGT-WINKIT	NAVI AGENT WINDOWS MEDIA
1	NAV700-WG	CX700 NAVI WORKGROUP
1	SE-CLAR-STDS	FOR SMI-S SUPPORT
1	CLHW-WAR24PRM	CL24 PRM HW WARU 7X24 4HR
1	CX700	CX700 FC ARRAY W 8GB MEM
	NAS Head 502G SYSTEM	PSI FOR NS500G
1	NS502G-FD	2 DM NS500 GTWY FLD INST
1	NS-CSFD	1 CS NS500/NS700 Fld Inst
2	NS-MIA	HSSDC TO FIBRE CONVERTER FOR TAPE CONNECT
1	MODEM-US	UNITED STATES MODEM
1	NS5-C-DCD	DOC & CD: NS500+CLAR
1	NAS-MGR-L	MANAGER ADVANCED EDITION

**REQUEST FOR QUOTATION
WV Office of Technology**

1	NS-ISCSI-DCD	CELERRA ISCSI APP DCD
1	NS502G-CIFS-L	NS500 CIFS LICENSE
1	NS5-IS-CI-L	NS500 ISCSI WITH CIFS LIC
1	PS-CUS-PRDSVC	Product-Based Services
	Brocade Fibre Switches SYSTEM	ENTERPRISE DIRECTOR SOLUTION
16	FM-LL30MD	30M MM FIBRE CABLE LC-LC
2	DSB2RLKT	RAILS FOR SYMM DS8B2
2	DS-4100B-00	BRCD 32-PORTS W/16 ACTIVE
2	DS4100B-8U-00	BRCD 8-PORT UPGRADE
1	PS-EXP-DSC	Ctx Switch 4Host Imp QSES

- 2.1.10 The proposed solution must be a Tier 1 solution and in the Gartner Magic Quadrant for storage area network (SAN) solutions
- 2.1.11 The storage system must have a minimum capacity at the time of installation of 6 terabytes (TB) of useable storage space in a RAID 5 configuration.
- 2.1.12 No data migration will be required at this time.
- 2.1.13 The storage solution must have the capability to install upgrades without disrupting content access.
- 2.1.14 Vendor must identify special electrical needs for the proposed solution in their proposal.
- 2.1.15 Well-defined industry and de facto standards in the areas of operating systems, database connectivity, communications, and storage must be followed, permitting the system to be integrated into environments that include other applications and other systems with minimum effort.
- 2.1.16 The vendor shall give WVOT a minimum of 48 hours notice prior to the equipment arriving at our location. This will allow WVOT to prepare space for the storage of the equipment.
- 2.1.17 The successful vendor will install and deliver equipment at the Capitol Complex location during normal business hours, Monday through Friday. 8:00 am to 5:00 pm. However, the successful vendor shall notify WVOT at least 48 hours in advance of the equipment arriving at the site, as to when to expect the equipment. Delivery shall be "inside" delivery at a location designated or specified by WVOT personnel. Equipment shall not be left at the loading dock or other common drop-off point.
- 2.1.18 The successful vendor shall supply WVOT with a single point of contact that can be contacted by WVOT for all issues related to installation of the equipment
- 2.1.19 During the installation of the system, the successful vendor's on-site personnel shall provide a "transfer of knowledge" to WVOT personnel. This transfer of knowledge shall include, but not be limited to, such information as tips for installation and hookup, any necessary programming, and tips or helpful hints for routine maintenance and keeping the system running smoothly or other information deemed important by the vendor personnel.

2.2 Maintenance/Warranty

- 2.2.1 The successful vendor must provide an original equipment manufacturers (EMC) three-year warranty for all licensed software and hardware, regardless of the manufacturer's warranties. The cost of the three-year warranty will be included in the purchase price listed as item A on Attachment 1. Cost, if any, associated with warranty service must be indicated in the pricing tables and must include all

REQUEST FOR QUOTATION
WV Office of Technology

parts, labor, hardware and software upgrades, software Help Desk services, travel or any other expense. No separate reimbursement will be made the vendor for any expenses.

- 2.2.2 The warranty shall include on-site hardware service with a four (4) hour response time, 7days a week, 24 hours per day.
- 2.2.3 The successful vendor must also quote an additional 2 year maintenance agreement to begin after the initial three (3) year warranty period to include hardware and software upgrades. This must be billed annually in arrears.
- 2.2.4 Any maintenance performed by a third party is solely the successful vendor's responsibility. The vendor must be the Agency's single point of contact. The vendor should provide a list of third parties that will be involved in this procurement.
- 2.2.5 The successful vendor must provide all hardware/software upgrades during the maintenance/warranty period at no additional cost to the maintenance/warranty quote.

2.3 ACCEPTANCE

- 2.3.1 WV Office of Technology shall test the storage solution to verify all mandatory requirements have been delivered as described under this RFQ. This acceptance test will be conducted subsequent to completion of all vendor testing, but prior to placing the system into production.
- 2.3.2 Vendor must provide support for the development and execution of the acceptance test. This will include providing an individual thoroughly familiar with the system as configured and installed at the WV Office of Technology to analyze questions and problems identified, recommend resolutions, and modify the system as necessary in order to correct the problem.
- 2.3.3 The vendor must be on-site during testing. Any system changes needed to address the question/problem will be discussed, documented and prioritized prior to being made by the vendor.
- 2.3.4 The system will not be accepted until all problems identified during the vendor and the Agency testing period have been resolved and the entire system has been up and running without error for 7 consecutive days. All costs for testing and implementation shall be included in the quoted hardware with installation and software with installation quote.
- 2.3.5 The State shall have full and free use of all systems, products, and/or deliverables supplied by this contract.

3. Cost Quotation Format/Bid Sheets

3.1 Vendor Response

- 3.1.1 Vendors shall complete the Cost Sheet (Attachment 1) that is included in the RFQ in order to be considered for award of this contract.
 - 3.1.2 A vendor not completing the above items, either in whole or in part, shall
-

- be disqualified for consideration.
- 3.1.3 If the successful vendor fails to identify any charges for services that are required to meet the terms and conditions of this Quotation, it will be the responsibility of the successful vendor to pay these charges and such cost shall not be passed on to the State.
- 3.1.4 The vendor will not be reimbursed for travel or any other expense. These costs must be included in the purchase price.

3.2 Cost Evaluation

- 3.2.1 The successful vendor shall be the vendor with the lowest purchase price of the equipment, including shipping, installation, transfer of knowledge, three (3) year all-inclusive warranty and additional 2 year maintenance warranty. This cost evaluation formula is spelled out on the Cost Sheet in Attachment 1.

3.3 Terms and Conditions

- 3.3.1. The Vendor is solely responsible for all work performed under this contract and shall assume prime contractor responsibility for all services offered and products to be delivered under the terms of this contract.
- 3.3.2 The vendor must define in their bid response any subcontractors who will be used to complete the requirements of this RFQ. Vendor shall include the name of the company, contact person and telephone number, type of work subcontractor will perform, and number of certified employees to perform work.
-

Attachment 1 – Cost Sheet

Purchase Price of Equipment – including shipping, installation, transfer of knowledge, and three (3) year all-inclusive warranty

(A) \$ 277,056⁰⁰

Cost of two (2) year post-warranty maintenance agreement

(B) \$ 72,032⁰⁰

(A) + (B) = \$ 349,088⁰⁰ Total 5-year cost of ownership to be used for evaluation.

Single Point of Contact Information for Installation and Migration:

Gene Trindell 717-938-1666

Network Operations Center Contact Information:

Unisys Support Center 1-800-328-0440

AFFIDAVIT

West Virginia Code §5A-3-10a states:

No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owned is an amount greater than one thousand dollars in the aggregate.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Debtor" means any individual, corporation, partnership, association, limited liability company or any other form or business association owing a debt to the state or any of its political subdivisions.

"Political subdivision" means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more counties or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

EXCEPTION:

The prohibition of this section does not apply where a vendor has contested any tax administered pursuant to chapter eleven of this code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

LICENSING:

The vendor must be licensed in accordance with any and all state requirements to do business with the state of West Virginia.

CONFIDENTIALITY:

The vendor agrees that he or she will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the agency's policies, procedures and rules. Vendors should visit www.state.wv.us/admin/purchase/privacy for the Notice of Agency Confidentiality Policies.

To the best of my knowledge and belief as of the date below
Under penalty of law for false swearing (West Virginia Code, §61-5-3), it is hereby certified that the vendor acknowledges the information in this said affidavit and are in compliance with the requirements as stated.

Vendor's Name: UNISYS CORPORATION

Authorized Signature: *Eddy Shiri* Date: 7/5/04

Storage Software License Agreement

_____, located at _____ ("Licensor"), and
_____, with a principal place of business at _____ ("Licensee"), agree that this Storage Software License Agreement ("SSLA") shall govern any Software and Distributed Software listed on an Order accepted by Licensor after the date of last signature below (the "Effective Date").

1.0 DEFINITIONS

- 1.1 "Core Software" shall mean the programming, microcode and/or firmware and related documentation that is included with the Designated Storage System to enable it to perform its basic functions, but excludes Enterprise Storage Software, Distributed Software and Maintenance Aids.
- 1.2 "Designated Storage System" shall mean Equipment consisting of a data storage device, identified by a serial number on its cabinetry or on its packing slip, on which the Core Software operates.
- 1.3 "Distributed Software" shall mean that programming and its related documentation, for use on the Designated Storage System or Host CPU, which is available subject to a "break-the-seal," hard-copy license agreement or a license agreement which requires an indication of acceptance thereof by electronic means.
- 1.4 "Enterprise Storage Software" shall mean the computer programming (and its related documentation), in object code form only, which is designed for use on the Designated Storage System and/or Host CPU and related items, if any.
- 1.5 "Equipment" shall mean the computer related hardware, including but not limited to data storage devices, identified on an Order accepted by Licensor.
- 1.6 "Host CPU" shall mean a central processing unit designated by Licensee to operate with the Designated Storage System.
- 1.7 "Maintenance Aids" shall mean any hardware, programming or other items used by Manufacturer or its third party suppliers to perform diagnostic or remedial activities under warranty or maintenance.
- 1.8 "Manufacturer" shall mean EMC Corporation
- 1.9 "Order" shall mean a document, which is signed by Licensee, and states the Software and/or Distributed Software that Licensee seeks to obtain from Licensor.
- 1.10 "Product Notice" shall mean the notice by which Manufacturer informs licensees of Manufacturer Software of Software's then current warranty, warranty upgrade and maintenance terms by means of written notices, published specifications and/or a posting on the applicable Manufacturer website (currently www.emc.com/products/warranty_maintenance/index.jsp).
- 1.11 "Software" shall mean (i) Core Software, (ii) Enterprise Storage Software, and (iii) all related documentation, and any subsequent releases thereof provided by Licensor, but excludes Distributed Software and Maintenance Aids.

2.0 SOFTWARE LICENSE

- 2.1 Licenses - Licensor grants Licensee a license to use Core Software, on the Designated Storage System with which it is licensed. Licensor grants Licensee a license to use Enterprise Storage Software, up to the permitted capacity on the specific Equipment, network, device or central processing unit ("CPU") for which Licensee has paid the applicable license fee. The foregoing licenses commence on shipment from Licensor and remain in effect as long as Licensee complies with this SSLA. Licensee must notify Licensor and pay the applicable additional license fee before exceeding the permitted capacity. The foregoing licenses shall be non-exclusive, non-transferable, and non-sublicensable and subject to the restriction that the Software be used solely in conjunction with the Designated Storage System or Host CPU for which it was licensed. Licensor may terminate licenses, without liability, if

Licensee breaches this SSLA and fails to cure within thirty (30) days after receipt of Licensor's written notice thereof. Upon termination for any reason, Licensee shall cease all use and return or certify destruction of Software (including copies) to Licensor. Licensee shall not, without Licensor's prior written consent, copy, provide, disclose or otherwise make available Software in any form to anyone other than Licensee's employees, consultants or independent contractors ("Personnel"), who shall use Software solely for Licensee's internal business purposes in a manner consistent with this SSLA. Licensee shall be fully responsible to Licensor for the compliance of its Personnel herewith. Any new revision of Software provided by Licensor is governed by this SSLA unless such is separately identified on an Order. Distributed Software shall be licensed solely by the hard-copy or electronic license which accompanies it.

- 2.2 Ownership - Software is licensed only. No title to, or ownership of, the Software is transferred to Licensee. Licensee shall reproduce and include copyright and other proprietary notices on and in any copies, including but not limited to partial, physical or electronic copies, of the Software. Neither Licensee nor any of its agents or Personnel shall modify, enhance, supplement, create derivative works from, reverse assemble, reverse engineer, reverse compile or otherwise reduce to human readable form the Software without Licensor's prior written consent. Licensee shall promptly report any violation of this clause and shall take such further steps as may be reasonably requested to remedy any such violation and to prevent future violations. Licensee may make one copy of the Software for back-up and archival purposes and to make use thereof on a substitute for the originally licensed Designated Storage System, network, device or Central Processing Unit ("CPU") only during the period in which the originally licensed Designated Storage System, network, device or CPU, as applicable, is inoperable due to malfunction or initiation of a disaster recovery program, and only if the original Software is deleted from the originally licensed Designated Storage System, network, device or CPU. If Licensee desires to transfer Software to another Designated Storage System, network, device or CPU which has a different model number than the originally Designated Storage System or CPU, Licensee shall pay, if applicable, an upgrade fee based on Licensor's then current price and upgrade policy and, at the next support anniversary date, pay applicable fees based upon the replacement model number.

- 2.3 Secondary Purchasers - If Licensee sells or transfers the Designated Storage System, Licensor shall offer to license the Core Software to any bona fide end-user (hereinafter "Secondary Purchaser") to whom Licensee has transferred such Designated Storage System pursuant to Licensor's then applicable requirements, so long as such Secondary Purchaser is not considered by Licensor, Manufacturer or its applicable third party supplier, to be an entity (i) that is a competitor of Manufacturer; or (ii) with whom EMC has engaged in litigation or disputes that include but are not limited to nonpayment and/or violations of EMC's intellectual property rights. If Core Software is licensed to a Secondary Purchaser, Licensee's license to use the Core Software shall be deemed terminated.

3.0 ACCEPTANCE, WARRANTY AND DISCLAIMER

- 3.1 Acceptance - For Software that Licensor has agreed to install, "Acceptance" shall occur on the earlier of (i) the date that such Software is first installed in accordance with Licensor's standard installation procedures and demonstrates conformance to the

applicable Manufacturer specifications, or (ii) thirty (30) days after shipment to Licensee if Licensee causes a delay in such installation. For Software that Licensor has not agreed to install, and for all Distributed Software, "Acceptance" shall occur fourteen (14) days after shipment to Licensee.

3.2 **Software Warranty** - Licensor warrants that Software shall, commencing upon shipment and continuing for the time period specified in the Product Notice, measured from Acceptance, under normal usage and with regular recommended service be free from material defects in materials or workmanship, and perform in accordance with the applicable Manufacturer published specifications. This warranty does not apply to problems that arise from (i) accident or abuse; (ii) interoperation with other products; (iii) improper installation or modification by other than Licensor or Manufacturer; or (iv) use in an environment or in a manner or for a purpose for which Software was not designed. Licensor's and Manufacturer's entire liability and Licensee's exclusive remedies under the warranties described in this Section shall be for Licensor to, at its option, (a) use reasonable efforts to remedy such defects or failure to so perform within a reasonable period of time; or (b) replace the affected Software; or (c) refund the amount paid by Licensee for the affected Software, less straight-line depreciation based on a five (5) year useful life, upon the return thereof to Licensor. Licensor does not warrant that the operation of Software will be uninterrupted or error free, or that all defects can be corrected.

3.3 **Limitation and Exclusions** - EXCEPT AS EXPRESSLY STATED IN THIS WARRANTY SECTION, LICENSOR PROVIDES SOFTWARE "AS IS" AND MAKES NO OTHER EXPRESS WARRANTIES, WRITTEN OR ORAL, AND ALL OTHER WARRANTIES ARE SPECIFICALLY EXCLUDED, INCLUDING, BUT NOT LIMITED TO THE IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT, AND ANY WARRANTY ARISING BY STATUTE, OPERATION OF LAW, COURSE OF DEALING OR PERFORMANCE, OR USAGE OF TRADE. LICENSEE ASSUMES FULL RESPONSIBILITY FOR THE SELECTION AND USE OF SOFTWARE.

4.0 **INFRINGEMENT INDEMNITY**

4.1 Licensor shall defend Licensee against any third party claim that use or disposition of Software infringes a US patent or copyright, and pay the resulting costs and damages awarded against Licensee by a court of competent jurisdiction, provided Licensee (i) notifies Licensor promptly in writing of such claim; (ii) grants Licensor sole control over the defense and settlement thereof; and (iii) reasonably cooperates in response to an Licensor request for assistance. Should Software become, or in Licensor's opinion be likely to become, the subject of such a claim, Licensor shall, at its option and expense, (a) procure for Licensee the right to make continued use thereof; (b) replace or modify such so that it becomes non-infringing; or (c) request return and upon receipt thereof refund to Licensee the price paid therefor by Licensee to Licensor, less straight-line depreciation based on a five (5) year useful life. Licensor shall have no liability if the alleged infringement is based on (1) combination with non-Licensor products; (2) use for a purpose of in a manner for which the Software was not designed; (3) use of any older version of Software when use of a newer revision would have avoided the infringement; (4) any modification not made with Licensor's written approval; (5) any modifications made by Licensor pursuant to Licensee's specific instructions; or (6) any intellectual property right owned or licensed by Licensee or any of their affiliates. THIS SECTION 4.0 STATES LICENSEE'S SOLE AND EXCLUSIVE REMEDY AND LICENSOR'S AND LICENSOR'S THIRD PARTY SUPPLIER'S ENTIRE LIABILITY FOR INFRINGEMENT CLAIMS.

5.0 **LIMITATIONS OF LIABILITY**

5.1 EXCEPT AS PROVIDED OTHERWISE IN SECTION 3.0 OR 4.0 ABOVE, LICENSOR'S AND MANUFACTURER'S TOTAL LIABILITY AND LICENSEE'S SOLE AND EXCLUSIVE REMEDY FOR ANY CLAIM WHATSOEVER, INCLUDING BUT NOT LIMITED TO CLAIMS UNDER CONTRACT, WARRANTY, NEGLIGENCE OR STRICT LIABILITY IN TORT, THAT ARISES OUT OF OR IN CONNECTION WITH SOFTWARE PROVIDED HEREUNDER, SHALL BE LIMITED TO PROVEN DIRECT DAMAGES CAUSED BY LICENSOR'S SOLE NEGLIGENCE IN AN AMOUNT NOT TO EXCEED (i) US\$1,000,000, FOR DAMAGE TO REAL OR TANGIBLE PERSONAL PROPERTY; AND (ii) THE PRICE PAID BY LICENSEE TO LICENSOR FOR THE SOFTWARE FROM WHICH SUCH CLAIM ARISES, FOR DAMAGE OF ANY TYPE NOT IDENTIFIED IN (i) ABOVE OR OTHERWISE EXCLUDED HEREUNDER. EXCEPT FOR CLAIMS ARISING UNDER SECTION 4.0 ABOVE, IN NO EVENT SHALL LICENSOR OR MANUFACTURER HAVE ANY LIABILITY FOR ANY SPECIAL, CONSEQUENTIAL, EXEMPLARY, INCIDENTAL, OR INDIRECT DAMAGES (INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS, REVENUES, DATA AND/OR USE), EVEN IF ADVISED OF THE POSSIBILITY THEREOF. NO CLAIM BASED ON SOFTWARE PROVIDED HEREUNDER MAY BE BROUGHT AGAINST LICENSOR OR ITS THIRD PARTY SUPPLIERS MORE THAN EIGHTEEN (18) MONTHS AFTER THE CAUSE OF ACTION ACCRUES.

6.0 **LICENSEE'S RESPONSIBILITIES**

6.1 Licensee shall (i) maintain an environment consistent with Software, Designated Storage System and Host CPU specifications; (ii) notify Licensor promptly when Software, the Designated Storage System or the Host CPU fails or is moved, and allow Licensor to inspect such at Licensor's then current rates; (iii) permit changes by Licensor at Licensor's expense which do not adversely affect performance or interchangeability, or are required by law or for safety or reliability; (iv) give Licensor reasonable access and furnish facilities reasonably necessary for performance by Licensor; and (v) ensure that Licensor is legally authorized to use all software provided by Licensee. The warranties described above and any maintenance plans do not include efforts to remedy, repair or replace Software as a result of (a) accident or neglect; (b) problems relating to or residing in other items or services with which the Software is used; (c) installation not in accordance with Licensor's instructions or the applicable Manufacturer specifications; (d) use in an environment, in a manner, or for a purpose for which the Software was not designed; or (e) installation, modification, alteration or repair by anyone other than Licensor or its authorized representatives. Licensor has no obligation whatsoever for Software moved without Licensor's consent or whose original identification marks have been removed, or for Software installed on hardware other than the Designated Storage System or Host CPU for which it was licensed. All replaced Software or portions thereof shall be returned to and become the property of Licensor. All of Licensee's rights in replaced Software shall terminate immediately and any subsequent releases of Software shall be governed by the same provisions as applied to the Software originally licensed. Licensee authorizes Licensor to store Maintenance Aids at Licensee's site, but shall (1) not copy or make any use thereof whatsoever; (2) protect such from disclosure to any third party and give Licensor reasonable access thereto; and (3) allow Licensor reasonable access thereto and shall not impede Licensor's removal thereof.

7.0 **VERIFICATION AND AUDIT RIGHTS**

7.1 Upon request of Licensor, and no more than once per year, Licensee shall promptly provide Licensor with a written statement certifying the

extent of Licensee's usage of Software identified by Licensor and allow Licensor and/or its designee to conduct a reasonable audit of the applicable Licensee facilities and records to determine whether or not Licensee's usage of such Software is in conformance with its paid for license usage. Licensee shall reasonably cooperate with and assist Licensor or its designee in any such audit, which shall be conducted during Licensee's normal business hours and shall not unreasonably interfere with Licensee's business activities. Should such audit statement indicate usage in excess of that for which Licensee is licensed, Licensee shall promptly reconcile its account with Licensor and pay the Licensor invoice, if any, that results from such reconciliation.

8.0 MISCELLANEOUS

8.1 Licensee shall comply with and obtain all authorizations required by U.S. export control laws and all related regulations. Licensor may assign this SSLA and any rights hereunder to Licensor's third

party suppliers. Licensee shall not assign this SSLA or any right or delegate any performance without Licensor's prior written consent, which consent shall not be unreasonably withheld, and any action in violation of the foregoing restriction shall be void. This SSLA (i) is the complete statement of the agreement of the parties with regard to the subject matter hereof; (ii) may be modified only by a writing signed by both parties; (iii) is governed by the laws of the Commonwealth of Massachusetts, excluding its conflict of law rules and the U.N. Convention on Contracts for the International Sale of Goods; (iv) applies to Software related services provided in the absence of a separate, signed agreement; and (v) shall control in case of an inconsistent or conflicting term set forth on an Order. No waiver shall be deemed a waiver of any prior or subsequent default hereunder. If any part of this SSLA is held unenforceable, the validity of the remaining provisions shall not be affected.

IN WITNESS WHEREOF, the parties have caused this SSLA to be signed on the respective dates indicated below.

Licensor: _____
By: _____
Name (Print): _____
Title: _____
Date: _____

Licensee: _____
By: _____
Name (Print): _____
Title: _____
Date: _____

EMC Warranty

The table below sets forth the warranty and installation terms for the following EMC® Equipment and its related Core Software:

CLARiiON® CX300/300i, CX500/500i and CX700 Products

CLARiiON CX3 Series Products

Warranty Duration	Warranty Service Features	Initial Product Installation	Replacement Parts and Installation	Removal of Replaced Parts and Return to EMC	Core Software Releases and Installation
3 years	Features 1 through 4 below provided by EMC	Performed by Customer unless specifically included by EMC in the particular model number ordered by Customer	Provided by EMC with next local business day delivery and performed by Customer unless otherwise deemed necessary by EMC	Performed by Customer, unless otherwise deemed necessary by EMC, with Customer to promptly return the replaced parts to EMC or be charged the applicable spare parts price	Performed by Customer, unless otherwise deemed necessary by EMC

Features:

- Telephone Technical Support** - Customer contacts the EMC Call Center by telephone on a 7X24 basis, reports the problem, and provides input for initial assessment of severity level.
 If Customer contact occurs from 8:00 a.m. to 5:00 p.m. on a local business day, EMC provides (i) a response by remote means on a within four (4) hours after receipt of such contact basis, and (ii) when deemed necessary by EMC, an onsite response on an 8:00 a.m. to 5:00 p.m., no later than the next local business day basis.
 If Customer contact occurs outside 8:00 a.m. to 5:00 p.m. on a local business day, EMC provides (i) a response by remote means on an 8:00 a.m. to 5:00 p.m., no later than next local business day basis, and (ii) when deemed necessary by EMC, an onsite response on an 8:00 a.m. to 5:00 p.m., no later than the next local business day basis.
- Online Self-Help** - If properly registered, Customer accesses online self-help on a 7x24 basis via EMC's designated website (currently "PowerLink").
- Case Logging** - Customer contacts the EMC Call Center by telephone, website or e-mail to log a case on a 7X24 basis. EMC provides a response in the same manner as stated above for Telephone Technical Support.
- Warranty Upgrade** - Upgraded Service Level options are available for the period of the Warranty Duration. See Maintenance page for details.

The warranty periods and service levels ("EMC Warranty Information") on this website apply (i) only between EMC and those organizations that procure the applicable products under a contract directly with EMC (the "EMC Customer"); and (ii) only to those products ordered by the EMC Customer at the time that the EMC Warranty Information is current. EMC may change the EMC Warranty Information at any time. The EMC Customer will be notified of any change in the EMC Warranty Information in the manner stated in the then current product ordering agreement between EMC and the EMC Customer, but any such change shall not apply to products ordered by the EMC Customer prior to the date of such change.

NOTE: Certain products contain remote support capabilities that allow (i) direct contact with the EMC support center if the programming detects a performance anomaly, and (ii) EMC to obtain more information, conduct remote repairs and expedite problem resolution (collectively the "Call-Home Feature"). If, during the applicable warranty period, all or any portion of the "Call-Home Feature" is disabled by or on behalf of the EMC Customer, then EMC shall invoice, and the EMC Customer shall pay, the amount of EMC's then current, standard surcharge for such disablement for all impacted products during the affected portion of such warranty period.

Products obtained from any EMC reseller are governed solely by the agreement between the purchaser and the reseller. That agreement may provide terms that are the same as the EMC Warranty Information on this website. The reseller may make arrangements with EMC to perform warranty and/or maintenance services for the purchaser on behalf of the reseller. Please contact the reseller or the local EMC sales representative for additional information on EMC's performance of warranty and maintenance services on Products obtained from a reseller.

EMC CLARiION CX700 Networked Storage System

Specifications

RAID Levels

- RAID 0: Data striped across three to 16 drives
- RAID 1: Mirrored pairs of two drives
- RAID 1/0: Data mirrored, then striped across four to 16 drives
- RAID 3: Independent data access on five or nine drives (with dedicated parity disk)
- RAID 5: Independent data access on three to 16 drives (with striped parity)
- Any combination of these RAID levels can exist on a single CX700
- RAID stripe depth configurable to 4, 16, 64, 128, or 256 sectors per disk
- MetaLUNs: Storage virtualization via online LUN expansion through either striping or concatenation
- Configurable global hot spares
- Rebuild priority tuning: adjustment of minimum I/O reserved for server use during rebuild

Front-End (Host) Connectivity

- Two storage processors per CX700
- Each storage processor has four 2 Gb Fibre Channel optical ports
- FCP SCSI-3 protocol
- Command tag queuing up to 256 tags
- FC-AL and FC-SW support
- Maximum Cable Length**
- Shortwave Optical: 300 meters (2 Gb), 500 meters (1 Gb)

Back-End (Disk) Connectivity

Each storage processor has four 2 Gb Fibre Channel Arbitrated Loops. Multiple RAID groups may be distributed across redundant loops to maximize bandwidth to disks. CX700 supports a maximum of 240 disk drives.

Drive Interface

Failover from each storage processor to both Fibre Channel loops is possible

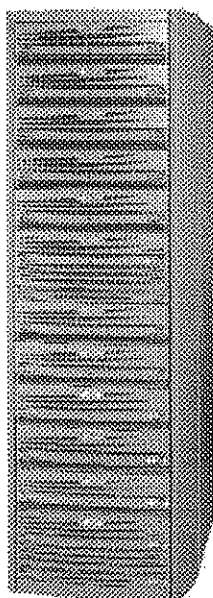
Nominal Capacity	73 GB (10,000)	146 GB (10,000)	300 GB (10,000)	73 GB (15,000)	146 GB (15,000)	500 GB SATA (7,200)
Formatted Capacity (520 bytes/sector, 1 MB = 1,048,576 bytes)	67.7 GB	135 GB	272 GB	67.7 GB	135 GB	465 GB
Form Factor	3.5"	3.5"	3.5"	3.5"	3.5"	3.5"
Height	1.0"	1.0"	1.0"	1.0"	1.0"	1.0"
Rotational Speed	10,000 rpm	10,000 rpm	10,000 rpm	15,000 rpm	15,000 rpm	7,200 rpm
Interface	Fibre Channel	Fibre Channel	Fibre Channel	Fibre Channel	Fibre Channel	Serial ATA
Data Buffer	16 MB	32 MB	32 MB	16 MB	32 MB	16 MB
Transfer Rates						
Buffer to/from Media MB/s	26.7-40.2 MB/s	43.78 MB/s	59-118 MB/s	57-86 MB/s	58-96 MB/s	29-64 MB/s
SP to/from Buffer	200 MB/s (max.)	200 MB/s (max.)	200 MB/s (max.)	200 MB/s (max.)	200 MB/s (max.)	150 MB/s (max.)
Access Time						
Average Seek	5.2 ms Read 6.2 ms Write	4.7 ms Read 5.3 ms Write	4.7 ms Read 5.4 ms Write	3.6 ms Read 4.0 ms Write	3.5 ms Read 4.0 ms Write	8.2 ms Read 9.2 ms Write
Rotational Latency	2.99 ms	2.99 ms	3.00 ms	2 ms	2 ms	4.17 ms

Available Software*

- SnapView™:** point-in-time view of information for nondisruptive backup and BCVs
- MirrorView™:** remote synchronous and asynchronous mirroring for disaster protection
- Nondisruptive Upgrade (NDU):** online upgrades of storage software and FLARE™ operating system
- Navisphere® Manager:** complete configuration, management, and event notification
- Navisphere Analyzer:** comprehensive performance, management, and trends analysis
- CLARAlert™:** constant system monitoring, call-home notification, and remote diagnostics
- PowerPath®:** path failover for continuous data access and dynamic load balancing
- SAN Copy™:** enables local or long distance data movement between various arrays (e.g., CLARiION, Symmetrix®, HP StorageWorks)
- VisualSAN®/VisualSRM™:** data protection, shared storage access, SAN management
- StorageScope™:** storage asset management

* Consult your EMC account manager for availability, software configuration, and compatibility information.

EMC® CLARiION® CX systems can be integral elements of a comprehensive information lifecycle management strategy—a strategy that helps your enterprise attain the maximum value from its information, at the lowest TCO, at every point in the information lifecycle. Information lifecycle management maps the right service level to the right application at the right cost—at the right time.



System Memory

Two Storage Processors per CX700
4 GB of Memory per Storage Processor

Dimensions (approximate)

Rackmount Processor Chassis with Standby Power Supplies (standard NEMA 19-inch rack)

Height	Width	Depth	Weight
8.75 in. (22.23 cm), 5 EIA units (Includes SPS)	17.5 in. (44.5 cm)	27.57 in. (70.02 cm)	139 lb. (63.1 kg) max.

Rackmount 2 Gbit Fibre Channel Disk Expansion Chassis with Dual Power Supplies

Height	Width	Depth	Weight
5.25 in. (13.33 cm), 3 EIA units	17.72 in (45 cm)	23.75 in. (60.38 cm)	88 lb. (40 kg) max. configuration

Rackmount 2 Gbit Fibre Channel Point-to-Point Disk Expansion Chassis with Dual Power Supplies

Height	Width	Depth	Weight
5.25 in. (13.33 cm), 3 EIA units	17.72 in (45.0 cm)	14.00 in. (35.56 cm)	68 lb. (30.9 kg) max. configuration

Rackmount ATA Disk Expansion Chassis with Dual Power Supplies

Height	Width	Depth	Weight
5.25 in. (13.33 cm), 3 EIA units	17.72 in (45.0 cm)	23.75 in. (60.38 cm)	84 lb. (38 kg) max. configuration

40U Rack Enclosure

Height	Width	Depth	Weight
75.0 in. (190.8 cm)	24.0 in. (61.1 cm)	36.0 in. (91.6 cm)	Empty: 300 lb. (136 kg)

Power

	Processor Chassis	2Gbit Fibre Channel Disk Expansion Chassis	2Gbit Fibre Channel Point-to-Point Disk Expansion Chassis	ATA Disk Expansion Chassis
AC Voltage	90–264 Vrms, single phase	90–264 Vrms, single phase	90–264 Vrms, single phase	90–264 Vrms, single phase
Frequency	47–63 Hz	47–63 Hz	47–63 Hz	47–63 Hz
Power Factor	.98 (min)	.98 (min)	.98 (min)	.98 (min)
DC Voltage	–36 V to –72 V dc	–36 V to –72 V dc	–36 V to –72 V dc	N/A
Power Consumption (maximum)	650 VA, 618W	400 VA, 392W	440 VA, 425W	300 VA, 294W
Heat Dissipation (maximum)	2,000 Btu/hour	1,340 Btu/hour	1,450 Btu/hour	1,017 Btu/hour
Protection	Rackmount: 10 amps, fused	Rackmount: 10 amps, fused	Rackmount: 10 amps, fused	Rackmount: 10 amps, fused
AC Circuits	Redundant, external AC circuits	Redundant, external AC circuits	Redundant, external AC circuits	Redundant, external AC circuits
Inlet Type	Dual Inlet Rackmount: IE320-C14 appliance coupler	Dual Inlet Rackmount: IE320-C14 appliance coupler	Dual Inlet Rackmount: IE320-C14 appliance coupler	Dual Inlet Rackmount: IE320-C14 appliance coupler

40U Cabinet (optional) AC Power Capability

Dual Inlets
NEMA L6-30P or IEC309-332 P6 or IP-57 (Australia)
200–240 VAC +/- 10%, Single Phase
47–63 Hz
4800 VA @ 200 V, 5760 VA @ 240 V
30A, 2-pole circuit breaker

Operating Environment

Temperature: 50–104 degrees F (10–40 degrees C)
Temperature Gradient: 10 degrees C/hr
Relative Humidity: 20% to 80% (non-condensing)
Altitude

8,000 ft. (2438.4 m) @ 104 degrees F (40 degrees C) max.
10,000 ft. (3048 m) @ 98.6 degrees F (37 degrees C) max.

Electromagnetic Emissions and Immunity

FCC Class A	EN55022 Class A
CE Mark	VCCI Class A (for Japan)
ICES-003 Class A (for Canada)	AS/NZS 3548 Class A (for Australia/New Zealand)
EN55024 Immunity, ITEBSMI	Class A (for Taiwan)

Quality and Safety Standards

UL 60950; CSAC 22.2-60950, FN 60950
NEBS Level 3 Certification
ETSI EN 300 386
Manufactured under an ISO 9000-registered quality system



EMC²
where information lives™

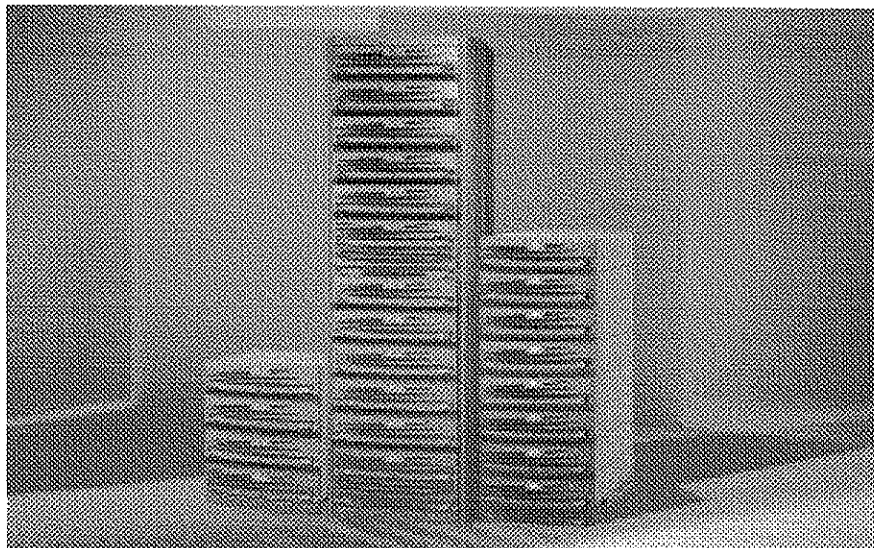
EMC Corporation
Hopkinton
Massachusetts
01748-9103
1-508-435-1000
In North America 1-866-464-7381

EMC², EMC, CLARION, Symmetrix, Navisphere,
PowerPath, VisualSAN, and where Information
lives are registered trademarks and SAN Manager,
FLARE, CLARAlert, SnapView, MirrorView, and
VisualSRM are trademarks of EMC Corporation.
Other trademarks are the property of their
respective owners.

© Copyright 2003, 2005 EMC Corporation.
All rights reserved. Published in the USA. 10/05

Specification Sheet
C1080.8

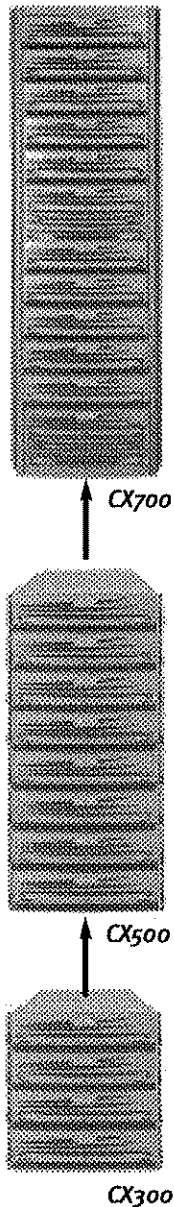
EMC CLARiiON CX Series



Extending the Lead in Mid-tier Storage

The Big Picture

- Proven seventh-generation architecture that scales from 365 GB to 76 TB in a modular, pay-as-you-grow fashion
 - Built-in high availability—no single point of failure, multi-path data access, mirrored cache, automated system diagnostics, non-disruptive upgrades, global hot-spare technology, AC or DC power
 - Powerful storage operating environment that spans the CLARiiON product line and supports different host connectivity, network, and drive technologies
 - Advanced information protection capabilities—local snapshots or clones, synchronous and asynchronous remote replication, and cross-platform data mobility
 - Powerful storage management with EMC Navisphere software—manage, discover, monitor, and configure CLARiiON systems from a Web browser—that can be enhanced with other EMC storage software that provides path management and SAN, storage resource, and replication management
 - Choice of network (Fibre Channel or iSCSI), drive technology (ATA or FC), deployment model (DAS, SAN, NAS)
 - Backed by the storage industry's number-one-ranked services and support organization
 - Continuous system monitoring, call-home notification, and advanced remote diagnostics
-



CLARiiON CX series arrays are unique with their data-in-place upgrade path to the next higher model in the series. Your data never needs to undergo a risky migration. Just swap storage processing enclosures and you're ready to go.

Leading the industry in simple, scalable, affordable storage solutions

EMC® CLARiiON® leads the mid-tier storage market in providing customers with cost-effective solutions that deliver the highest levels of performance, functionality, and reliability.

The unique combination of proven hardware design and advanced software capabilities enables CLARiiON to meet the growing IT challenges of today's midsize enterprises—scaling system capacity and performance, simplifying management in complex environments, and delivering increasing levels of information availability and protection for critical applications and data.

The CLARiiON CX series—CX300/CX300i, CX500/CX500i, and CX700 models—includes offerings that are the ideal fit whether your requirements are for departmental applications or support for data-center-class business-critical systems. For companies looking for better ways to address their IT challenges, the CLARiiON CX series delivers advanced storage capabilities not found in other mid-tier storage systems. These capabilities include powerful secure management tools, safeguards to ensure continuous data availability and integrity, advanced array-based information replication functionality, virtual LUN technology, and data mobility within and between systems. All this is available in your choice of systems ranging from affordable starter solutions to high-performance maximum-capacity configurations for your most demanding requirements.

CLARiiON architecture—built to last, built for value

The CLARiiON architecture, based on a common high-availability design, enables the CX series to address a broad range of application environments. All CX series systems are built on the same redundant modular architecture and run the FLARE™ storage operating environment, offering customers a consistent modular growth path starting with the CX300 and scaling up to the CX700, and supporting capacities from 365 GB to 76 TB in a single system. This is achieved through CLARiiON's unique data-in-place upgrade capability that enables customers to scale performance and functionality while upgrading from one model to another by simply swapping storage processing enclosures.

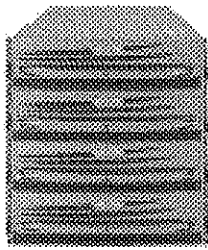
For increased reliability, the CLARiiON architecture includes dual active storage processors, each able to independently access every drive in the array. This design ensures continuous operations via automated failover in the event one storage processor becomes unavailable. In addition, the FLARE storage operating environment provides the CLARiiON architecture with the flexibility to support multiple generations of hardware and different types of interconnects with consistent functionality, thereby ensuring investment protection.

The FLARE storage operating environment also delivers the advanced functionality needed to increase the cost effectiveness and application availability of CLARiiON through a variety of feature such as:

- **CLARiiON metaLUN technology:** Groups of LUNs that, through striping or concatenation, give a user flexibility and control of data layout in the array. MetaLUNs increase performance capability by allowing a volume to span a large number of drives and enable better capacity utilization by non-disruptively expanding capacity anywhere in the array.
- **CLARiiON Virtual LUN technology:** Enables movement of volumes within a CLARiiON array without disrupting the application. This capability enables the dynamic movement of data from FC to ATA drives and provides ILM-type capabilities within a single CLARiiON array. Data can be also be moved from a volume of one RAID type to a volume of a differ-



CLARiiON CX300, CX500, and CX700 Fibre Channel systems are NEBS Level 3 certified, delivering the benefits of automated networked storage to the most rugged computing environments.



The CLARiiON CX300/CX300i scales from 5 to 60 disk drives, supports up to 64 dual-connected hosts, can take advantage of EMC's unique data-in-place upgrade to CX500/CX500i models, and can be outfitted with a broad complement of storage software for exceptional functionality for this class of storage system.

ent RAID type to meet the performance requirements of a particular application. Virtual LUN technology can also be leveraged to improve capacity utilization by moving data to underutilized spindles in the array.

Continuous availability and data integrity to keep your business running

CLARiiON delivers superior levels of protection through advanced capabilities of the system, including:

- Write cache, where each storage processor contains both primary cached data for its LUNs and a secondary copy of the cache for its peer storage processor.
- Battery backup for controllers and cache vault disks which allows for an orderly shutdown to ensure data protection in the event of a power failure.
- RAID protection levels 1/0, 0, 1, 3, and 5, all of which can co-exist in the same array simultaneously to match the different protection requirements of your data.
- Redundant data-paths, power supplies, drive connections, storage processors—all with non-disruptive field replacement capabilities.
- Continuous cache and data integrity detection/correction, automatic diagnosis, and advanced call-home capabilities for enhanced availability.
- UltraPoint™ Technology combines a new point-to-point Fibre Channel disk array enclosure (DAE) design with more granular fault-detection and isolation capabilities in the FLARE operating environment to complement the existing patented RAID algorithms, end-to-end parity checking, SNIIFER data integrity utility, and global hot spares to enhance system robustness and deliver maximum reliability and availability.

Flexibility to choose deployment model, network technology, and drive type to fit your exact needs

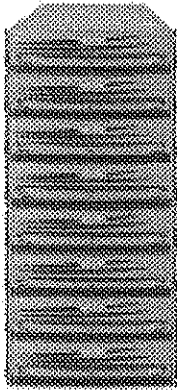
With support for direct-attach, SAN, and NAS deployments, the CLARiiON CX series platform gives customers the ability to get all the benefits of storage consolidation in a deployment that fits their particular requirements. By providing a choice of iSCSI or FC storage area network (SAN), small businesses—or those without existing in-house Fibre Channel skills—can gain the benefits of network storage using their native IP networking skills. CLARiiON CX iSCSI arrays incorporate high-speed iSCSI TOEs (iSCSI TCP/IP off-load engines) in the hardware design, to maximize storage performance over an IP storage network. Customers can add NFS and CIFS connectivity to their CLARiiON SAN deployment by coupling a CLARiiON array with an EMC Celerra® NS or NSX gateway.

By offering both Fibre Channel and SATA (Serial Advanced Technology Attachment) disk technology, customers can match application requirements with both performance and cost parameters. Finally, because CLARiiON can mix and match drive types within the same array, customers can use their existing platform to keep information online for longer periods of time for:

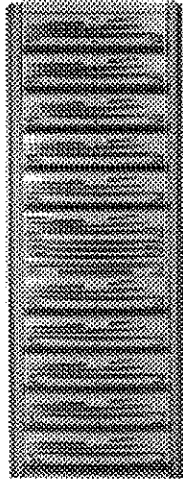
- Backup-to-disk applications—improving service levels over traditional tape solutions
- Data replication—deploying cost-effective SATA drives with EMC SnapView™ and EMC MirrorView™ replication software
- Large file applications—enabling faster processing at lower cost for applications that handle massive data sets

CLARiiON CX300/CX300i—small in size, big on capability

The entry point into the CLARiiON CX series, the CX300 networked storage system is optimized for cost-effective workgroup solutions. With the choice of DAS, SAN or NAS deploy-



The CX500/CX500i can be configured with 5 to 120 disk drives and supports up to 128 dual-connected hosts. CX500 customers can take advantage of EMC's unique data-in-place upgrade to the CX700 model, and can expand functionality through a broad range of EMC and third-party software.



The enterprise-class CX700 shares the same hardware and software architecture as the CX500, but with faster processors, higher capacity, greater connectivity, and greater throughput. It scales from 5 to 240 disk drives and supports up to 256 dual-connected hosts

ment, the CX300 offers easy management and high performance for file/print, e-mail, small database, and Web services applications. Flexible and easy to deploy, the CX300 delivers the same modularity and Web-based management as the CX500 and CX700 in a compact form factor. Available in a rack-mount chassis, the CLARiiON CX300 offers an entry point of 365 GB capacity and has the ability to scale up to 60 drives for a maximum system capacity of 19 TB. The CX300 design fully exploits 2 Gb Fibre Channel technology, supporting up to 64 dual-attached hosts. Additionally, it can benefit from EMC's data-in-place upgrades and can run a broad complement of storage software for exceptional functionality. CLARiiON CX300 Fibre Channel systems are available as NEBS Level 3 certified with built-in DC power options.

The CX300i makes networked storage more affordable by using IP connectivity. The CX300i delivers cost-effective storage consolidation for Windows and Linux servers in workgroups and small to medium businesses and is compatible with industry-standard Ethernet switches.

CLARiiON CX500/CX500i—advanced features, highly scalable

The CLARiiON CX500 extends the CX series into the heart of the mid-tier storage market. The CX500 fits in a standard EMC 40U cabinet or an industry-standard rack with a 4U entry-level configuration offering up to 4 TB of raw storage. It can be configured with 5 to 120 disk drives for a maximum system capacity of 38 TB and fits in a maximum of 25U of rack space—50 percent less rack space than competing products with average configuration. The CX500 supports up to 128 dual-attached hosts. The CX500 delivers up to twice the bandwidth performance of the CX300, excelling in graphics and video application environments.

The CX500i delivers data-center-class networked storage and functionality combined with low-cost IP connectivity for Windows and Linux servers. As expected, the CX500i provides leading iSCSI performance with best-in-class scalability.

The CX700—tops in function, scale, and flexibility

Sharing the same hardware and software technologies as the CX500, the CX700 incorporates faster processors, more cache, higher capacity, and greater connectivity and throughput. The CX700 provides eight host connections, supporting up to 256 dual-connected hosts. Fitting into a standard EMC 40U cabinet or industry-standard rack, the CX700 can be configured with 5 to 240 disk drives.

A complete suite of advanced storage software

EMC CLARiiON offers a complete suite of advanced storage software—the most extensive in the industry designed for full backwards compatibility. For more information, please refer to the respective data sheets for each of the software products listed below.

Storage Management Software

EMC Navisphere Manager—securely manage CLARiiON storage from anywhere, anytime

The EMC Navisphere® Management Suite simplifies and automates the management of your CLARiiON storage infrastructure through a simple-to-use, browser-based GUI or via the CLI. Navisphere is common across the CX series and previous generations of CLARiiON arrays, enabling customers to securely discover, monitor, tune, and provision storage on multiple CLARiiON storage systems—from anywhere, at any time—including management of CLARiiON replication software. Navisphere Analyzer provides detailed realtime and his-

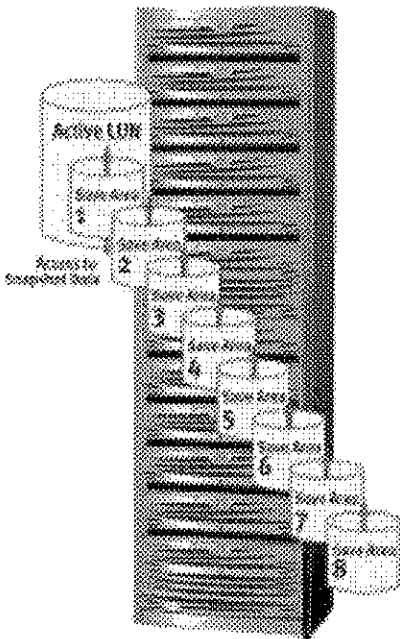
torical performance information about your CLARiiON array, allowing you to investigate performance patterns and trends before problems occur.

Navisphere Management Suite also integrates into and can be operated through the EMC ControlCenter® family of enterprise-class storage infrastructure management software. This integration enables you to easily manage your entire mixed heterogeneous storage infrastructure—consisting of EMC CLARiiON, EMC Symmetrix®, other EMC platforms, as well as non-EMC storage arrays—all from one control panel. In Addition, EMC fully supports, and all CLARiiON CX series systems can be managed by, SMI-S, the emerging industry standard for storage management.

EMC VisualSRM and VisualSAN—simplify SRM and SAN management for mid-tier environments

EMC VisualSRM™ is a storage resource management (SRM) application that discovers, reclaims, and manages storage at the file level. VisualSRM includes a full suite of reports that provide summary, file-level detail, and chargeback reporting for file systems, mail servers, and database servers. VisualSRM supports a wide range of platforms and enterprise applications including Exchange, Oracle databases, Sybase databases, and SQL Server databases.

EMC VisualSAN® network management software provides discovery, visualization, monitoring, and configuration capabilities for CLARiiON-based storage area networks.



SnapView can create up to eight business continuance volumes (BCVs) from a production source, and up to eight fully readable and writeable point-in-time snapshots of logical units using EMC's copy-on-first-write algorithm. These can be used for non-disruptive backups, testing, analysis, or simply to be kept on a rotational basis for potential recovery.

Path Management Software

EMC FullTime PowerPath—keep your critical applications online

EMC FullTime™ PowerPath® software provides application continuity in the event of an I/O channel failure for both CLARiiON FC and iSCSI SAN deployments. PowerPath offers multipath access between CLARiiON and attached servers and storage, automatically shifting the I/O load to surviving paths if one or more fails, and resumes use of failed paths upon their repair. PowerPath also dynamically balances the I/O load over all channels, enabling more work to be done in less time.

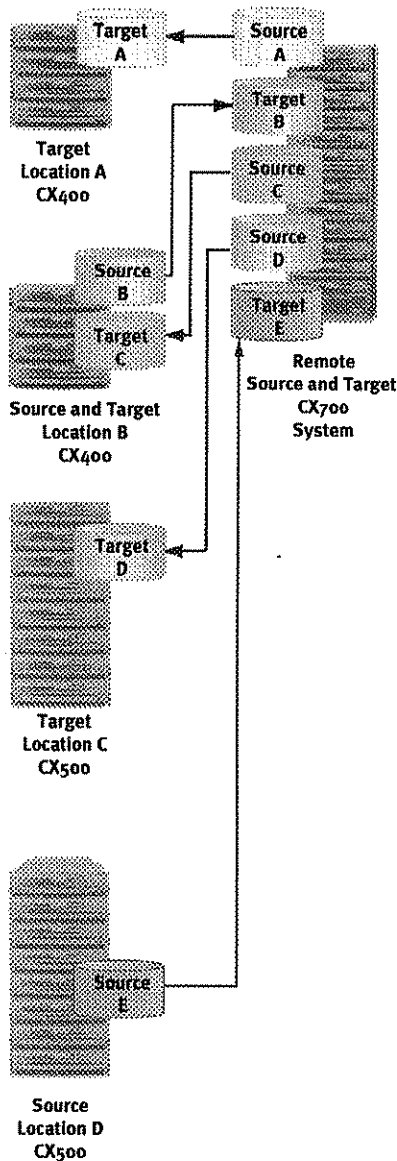
Data Protection and Data Mobility Software

EMC SnapView—accelerate backup and restore, application integrity, and application development, all from one software product

EMC SnapView™ software is available across the CLARiiON CX family and cost-effectively accelerates backup and recovery through economical, disk-based consistent split and "instant restore" of production data. SnapView creates consistent point-in-time snapshots and full-copy business continuance volumes (BCVs) of production data while maintaining application integrity for non-disruptive backup. Restore information and applications consistently in seconds versus the hours often required for traditional tape-based methods.

EMC MirrorView—maximize data availability through advanced synchronous and asynchronous disaster recovery

EMC MirrorView™ software provides highly available data storage by performing remote data mirroring—uni-directionally or bi-directionally—between CLARiiON arrays across campus or across the globe. And because MirrorView is array-based, applications and servers are free to service users. MirrorView/Synchronous (MirrorView/S) replicates data continuously—on an application I/O-by-I/O basis for maximum availability.



MirrorView sessions for remotely mirroring information are quickly and easily managed from one central location using EMC Navisphere software. MirrorView is compatible with midsize and high-end CLARiiON CX Fibre Channel series arrays as well as previous generation FC4700 arrays.

MirrorView/Asynchronous (MirrorView/A) replicates data independent of the application I/O, ensuring recoverability and extending distance while reducing network bandwidth requirements. MirrorView is tightly integrated with SnapView snapshot software for simplification and consolidation of routine processes. MirrorView/Synchronous and MirrorView/Asynchronous run on the CX700, CX500, CX600, and CX400 networked storage systems.

EMC SAN Copy—copy data between multi-vendor storage systems

EMC SAN Copy™ software enables high-speed data copying between multi-vendor storage systems. With SAN Copy you can rapidly copy data between CLARiiON and Symmetrix systems and between EMC, HDS, IBM (Shark and DS4000 series; formerly FASTT), Sun, and HPQ systems. This gives customers the flexibility to deploy a data mobility and data protection configuration that includes all your data center, regional, and distributed systems—regardless of location. SAN Copy reduces risk and lowers costs associated with routine data movement, including protection of data against disasters. SAN Copy is tightly integrated with SnapView snapshot and BCV/clone software so that a replica that is created via SnapView can be replicated to a second array with SAN Copy. SAN Copy runs on the CX700, CX500, CX600, and CX400 arrays. SAN Copy/E runs on the CX300 and AX100 and can replicate data to arrays running SAN Copy.

EMC FullTime RepliStor—host-based data protection software for Windows servers

EMC FullTime RepliStor® software provides file-based local and remote asynchronous replication for Microsoft Windows environments using TCP/IP connectivity. RepliStor provides data protection capabilities for CX300 and CX iSCSI-based systems.

Replication Manager—automate replication of application data

EMC Replication Manager simplifies management and automation of the entire information replication process for CLARiiON SnapView, SAN Copy, and other EMC replication software. From replica discovery, configuration, and scheduling to a simple wizard-driven process for recovery operations, Replication Manager allows you to maximize the value of point-in-time copies of application data. Replication Manager also integrates with leading applications and databases such as Microsoft Exchange, SQL, and Oracle, as well as Windows and UNIX filesystems.

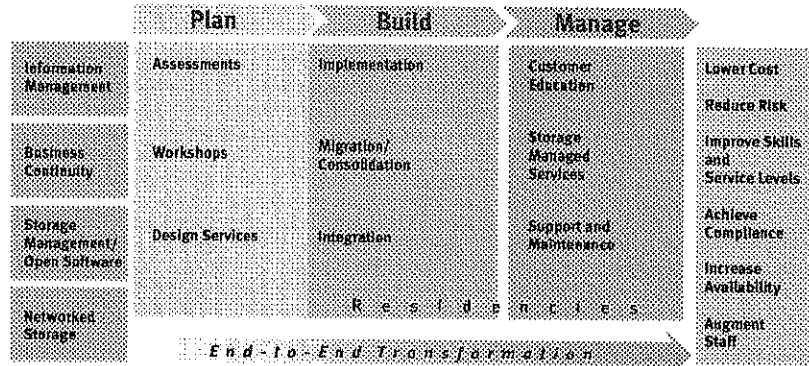
In addition to these EMC software applications, a wealth of third-party solutions is available from independent software vendors. As members of the EMC Developers Program™, they have access to EMC's application programming interfaces (APIs) and develop solutions that take advantage of the latest CLARiiON capabilities.

Maximize CLARiiON CX series benefits with EMC Services

EMC Services provides expert plan, build, and manage services to ensure that your EMC CLARiiON hardware and software perform optimally in your environment and meet your business objectives. Trained services professionals and project management teams, leveraging EMC's extensive storage deployment best practices and proven methodologies, accelerate time-to-value without straining the resources you have, minimizing risk to your business and your budget.

In addition to exceptional performance, availability, functionality, and economic benefits, CLARiiON CX customers have access to the world's top-rated customer service and support. The EMC Services organization helps you make the most of your EMC technology investment with a continuum of best-in-class services spanning the entire information lifecycle.

In addition to exceptional performance, availability, functionality, and economic benefits, CLARiiON CX customers have access to the world's top-rated customer service and support. The EMC Services organization helps you make the most of your EMC technology investment with a continuum of best-in-class services spanning the entire information lifecycle.



EMC Services for the IT lifecycle

EMC Services delivers results to our customers throughout the IT lifecycle: Plan, Build, Manage. Strategic storage consulting services from EMC Consulting help companies achieve the maximum value from their information, at the lowest total cost, at every point in the information lifecycle. EMC Technology Solutions professionals deliver product-specific point solutions in addition to comprehensive custom planning, design, implementation, and integration services for EMC technology—everything from consolidation of your current resources to a transformation of your environment to achieve information lifecycle management.

EMC Customer Service—four-time winner of the SSPA STAR Award for outstanding mission-critical support—helps you keep your information available 24/7 to deliver competitive advantage and drive revenue. And EMC Global Education drives the value of your investment with a comprehensive portfolio of customer courses.

CLARiiON CX300/CX300i, CX500/CX500i, and CX700 systems come standard with a two-year, 24/7, onsite warranty on hardware and the FLARE storage operating environment, and a 90-day warranty on software. Warranties can be extended with an EMC Service Agreement.* Ask your EMC sales representative about the full spectrum of services from EMC that can benefit your organization.

*Warranties may vary outside the United States. Contact your EMC representative for local warranty and service terms and conditions.



EMC Corporation
Hopkinton
Massachusetts
01748-9203
1-508-435-1000
In North America 1-866-464-7381

EMC², EMC, EMC ControlCenter, Celerra, CLARiiON, Connectrix, Navisphere, PowerPath, RepliStor, Symmetrix, TimeFinder, VisualSAN, and where information lives are registered trademarks and EMC Developers Program, FLARE, FullTime, MirrorView, SAN Copy, SnapView, UltraPoint, and VisualSRM are trademarks of EMC Corporation. All other trademarks used herein are the property of their respective owners.

© Copyright 2004, 2005 EMC Corporation. All rights reserved. Published in the USA. 7/05

Data Sheet
C1075-4

Take the Next Step

For more information on the superior performance, functionality, and economics offered by the CLARiiON CX series of mid-tier networked storage systems, contact your EMC sales representative or authorized EMC value-added systems integrator. You can also visit our website at www.EMC.com or, in North America, call EMC directly at 1-866-464-7381.