

IBM TotalStorage Proven™ program

Decru, Inc. Decru DataFort FC525/FC520H and T525/T520H



Testing Template

This document will be used to describe, from a technical perspective, the elements that were included as part of the IBM TotalStorage Proven testing. It is intended to give an overall picture of the technical elements of the configuration, with a brief description of the results of the testing including any specific highlights of the interoperability results.

High-level architecture/description, include a list of products that meet the compatibility requirements (“Approved Product(s)”) as well as a list of the IBM storage products with which the Approved Products meet the compatibility requirements (“Qualified IBM Storage Products”):

Decru DataFort FC and T-Series storage security appliances enable comprehensive security for stored data through host authentication, access controls, and strong data encryption. DataFort FC and T-Series appliances are deployed in Fibre Channel SAN environments, and are easily managed with a centralized, secure interface. An automated key management system ensures that data is both available and secure.

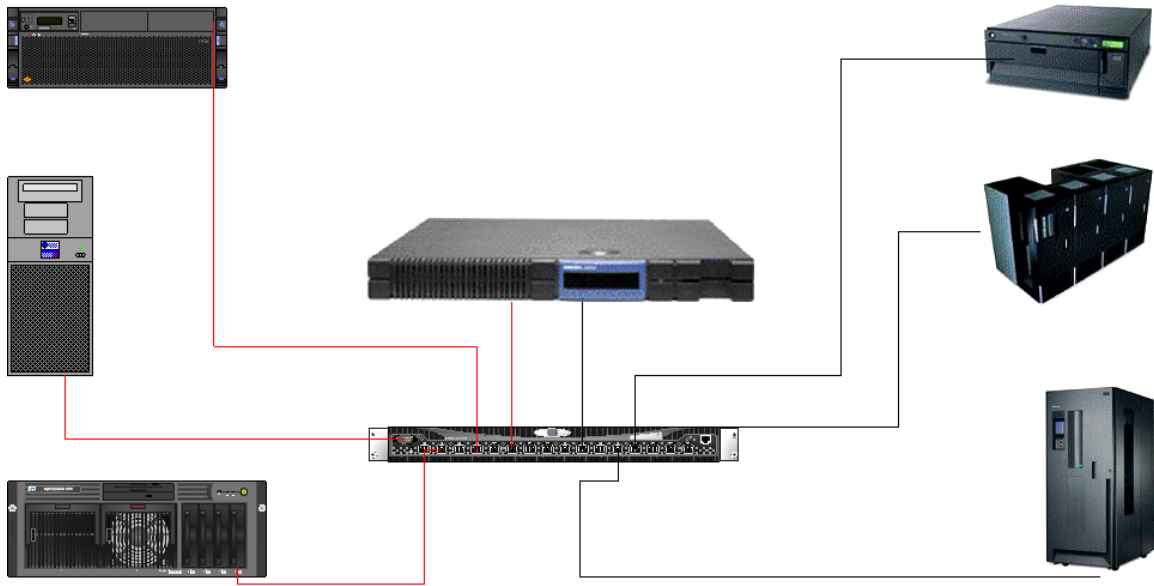
The DataFort FC and T-Series appliances meet the compatibility requirements for the following IBM tape libraries: 3582, 3494, and 3584.

Testing scenario

The testing scenario is designed to insure interoperability between Decru DataFort storage security appliances and IBM tape systems in a variety of environments.

DataFort is installed in-line between Fibre Channel servers and the tape libraries that they are attached to. All data moving through the DataFort is encrypted so that the final data at rest on the tape media is only available for retrieval through the DataFort. From a security and compliance standpoint, DataFort ensures that the loss or theft of tapes does not expose sensitive information to unauthorized access.

IBM TotalStorage Proven™ program



Servers:
AIX (RS/6000)
Solaris (SPARC)
Windows 2000/2003 (i386)

— Host Zone
— Storage Zone

Tape Libraries:
3582
3494
3584

Testing level: Comprehensive

What was tested

Decru regularly tests with both an IBM 3582 tape library and 3494 tape library in its engineering SAN fabric. They are in constant use for backups and restores as well as for use in failover and key management tests.

In addition, Decru worked with IBM in testing the 3584 tape library. The specific hardware versions tested with that library represent a smaller set than what has been tested with the 3582 and 3494.

Specific versions of products

Testing with the 3494 and 3582 libraries:

Server Types:
Dell 1600 SC 1600
SUN Sparc Ultra60
IBM RS/6000 7046-B50

IBM TotalStorage Proven™ program

Operating Systems:

Windows 2000 Advanced Server SP4 (Build 2195: Service Pack 4)
AIX 5.2 SP5 (5200-05)
Solaris 2.9 (5.9)
Solaris 2.10 (5.10)
Windows 2003 Enterprise Edition SP2 (Build 3790: Service Pack 2)

Host Bus Adapters:

	Windows 2000		Windows 2003		Solaris		AIX	
	Driver Version	Firmware Version	Driver Version	Firmware Version	Driver Version	Firmware Version	Driver Version	Firmware Version
Emulex LP8000					6.01f	3.92A2		
Emulex LP9002							5.2.0.30	3.92A2
Emulex 10000	5-2.23a6	1.90a4						
JNI 6562					5.3.1.3	3.9.1		
Qlogic 2200F	8.1.5.15	2.02.03			4.13.01	2.2.6		
Qlogic 2300F			9.0.1.12	3.03.06				

Storage Products:

Vendor: IBM
Library Model: 3582
Version: 004.0B1
Drive Type: 3580 (Ultrium-II) (2)
Drive Code Level: 3434

Vendor: IBM
Library Model: 3494
Version: 526.19
Drive Type: 3590 (1)
Drive Code Level: E1A0

Fibre Channel Switches:

Vendor: Brocade
Model: 3200
Version: 3.2.0

Vendor: Brocade
Model: 3800
Version: 3.2.0

Vendor: Brocade
Model: 2800
Version: 2.6.0f

IBM TotalStorage Proven™ program

Vendor: Brocade
Model: 2800
Version: 2.6.2a

Vendor: McData
Model: Spherion 4500
Version: 07.01.00 5

Backup Software:

Vendor: Legato
Product: NetWorker
Version: 7.1.1, 7.1.2, 7.1.3
Operating System: Windows 2000, Windows 2003, Solaris 2.9

Vendor: Veritas
Product: NetBackup
Version: 5.0
Operating System: Windows 2000, Windows 2003, Solaris 2.9, AIX 5.2

Vendor: Veritas
Product: NetBackup
Version: 4.5
Operating System: Windows 2000, Windows 2003, Solaris 2.9

Vendor: IBM
Product: Tivoli Storage Manager
Version: 5.2
Operating System: AIX 5.2, Windows 2000

Vendor: Veritas
Product: BackupExec
Version: 9.1
Operating System: Windows 2000, Windows 2003

Description of the testing results obtained

Testing took place during Q1 2005. DataFort appliances can be deployed either in-line or fabric attached in 1 or 2 Gbps Fibre Channel environments. Multiple hosts and multiple drives can be connected to a single DataFort appliance – the primary sizing methodology is based upon throughput and topology.

IBM TotalStorage Proven™ program

Support contacts

Decru Technical Support

Online Help

24x7 access to the Decru support website allows users to quickly obtain a variety of support information at their convenience. Online information includes the Web support knowledgebase, the Decru DataFort compatibility matrix, white papers, release notes, and product documentation.

<http://www.decru.com/support.htm>
support@decru.com

Telephone Technical Support

The Decru Service Plan provides direct telephone access to the Decru Technical Assistance Center. Decru support engineers are available on call 24x7.

Within USA: 1-877-DecruTS (1-877-332-7887)

Outside USA: 650-587-3515

Decru Headquarters

275 Shoreline Drive, Suite 450

Redwood City, CA 94065

Phone: 650-413-6700

Fax: 650-413-6790

This product information sheet was prepared by and/or on behalf of Decru, Inc. IBM is not the author of this product information sheet, and any reproduction, redistribution or republication of such sheets by IBM is not intended, nor should be deemed, to be an endorsement, recommendation or warranty of the non-IBM products described herein. For information concerning IBM's products and services, please visit www.ibm.com.