

## IBM System Storage Product Guide



Today, information has become the lifeline for business sustainability and competitive advantage. Companies of all sizes—companies like yours—are searching for practical ways to create business value—to get their arms around information, correlate insights and to confidently predict outcomes and take action.

For CIOs, the information era poses unique challenges: how to cost-effectively store, archive and retrieve a virtual explosion of new information, how to protect and secure that information, meet compliance requirements and make that information accessible for business insight, where and when it's needed.

Without a dynamic information infrastructure, you may be facing higher operational costs and greater exposure to business risks.

IBM offers Information Infrastructure solutions to help you efficiently manage information growth, support compliance, reduce storage and archiving costs and enable continuous access to information in support of business requirements.

Learn more about IBM Information Infrastructure, including the full range of data storage solutions and companion software and services offerings at: [ibm.com/information\\_infrastructure](http://ibm.com/information_infrastructure).

#### **What's New?**

IBM has invested billions of dollars to enhance System Storage™ products and services to better meet the information infrastructure needs of businesses like yours. This Product Guide features several new products:

- IBM System Storage TS7650 ProtecTIER® Data Deduplication Appliance
- IBM XIV® Storage System IBM System Storage
- SAN Volume Controller Entry Edition

- IBM System Storage N6060 series
- IBM Self-encrypting Storage and Key Management Solution (TKLM + LTO bundle)
- IBM Virtual Tape for Mainframe (VTFM)

The following products featured in this guide have been significantly enhanced:





- IBM System Storage DS8000® R4.2 Disk System with new options for drive-level disk encryption, Solid State storage, and 1 TB SATA drives
- IBM System Storage DS3000 Express
- IBM Comprehensive Data Protection Solution (TSM Fastback bundle)

Entry-level/Midrange Tape Products



	Entry-level Tape Drives				Entry-level Tape Libraries				Midrange Tape Drives		Midrange Tape Libraries		
	TS2230	TS2240	3580	TS2340	TS2900	TS3100	TS3100	TS3200	TS3200	TS1030	TS1040	TS3310	TS3500
<b>Product</b>	3580	3580	3580	3580	3572 featuring Ultrium Half-high drives	3573 L2U	3573 L2U featuring Ultrium Half-High drives	3573 L4U	3573 L4U featuring Ultrium Half-High drives	3588	3588	3576	3584
<b>Machine Type</b> model	<b>3580</b> H3L, H3S, PNs 3580L3E, 3580S3E	<b>3580</b> H4S, PNs 3580S4E, 3580E4S	<b>3580</b> L33	<b>3580</b> L43, S43, PNs, 3580L4X, 3580S4X	<b>3572</b> PNs 3572S3H, 3572S4H, 3572S4R, 3572S3R, 3572S4E, 3572S3E	<b>3573</b> L2U and PNs 3573L4S, 3573F4S, 3573S4S	<b>3573</b> PNs 3573L32, 3573S32, 3573 S42, 3573 E42	<b>3573</b> L4U and PNs 3573L4H, 3573F4H, 3573S4H	<b>3573</b> PNs 3573L34, 3573S34, 3573 S44, 3573 E44	<b>3588</b> F3B	<b>3588</b> F4A	<b>3576</b> L5U E9U	<b>3584</b> L53 D53 S54
<b>Product strengths</b>	Multiplatform support Half-high form factor Lower entry price	3 Gbps SAS attachment Encryption capable Multiplatform support High capacity Half-high form factor	Multiplatform support Backward read capable to LTO1 Max performance for LTO3	3 Gbps SAS attachment Encryption capable Multiplatform support High performance High capacity	Multiplatform support Half-high form factor Lower entry price High capacity	Multiplatform support High performance High capacity	Multiplatform support Same capacity as full high at a lower price Supports both LTO3 and LTO4 Half-high drives	Multiplatform support High performance High capacity	Multiplatform support, Same capacity as full high at a lower price Supports both LTO3 and LTO4 Half-high drives	Multiplatform support High performance High capacity	Multiplatform support High performance High capacity Data protection	Multiplatform support High performance High capacity Modular design	Multiplatform support High performance High capacity High density (HD) Slot Technology
<b>Number of drives</b>	1	1	1	1	1 LTO half-high	1	1-2 LTO half-high	1-2	1-4 LTO half-high	1	1	1-18	1-192
<b>Max number of cartridges</b>	1	1	1	1	9	24	24	48	48	NA	NA	396	6,887 <sup>1</sup>
<b>WORM/Encryption</b>	yes/no	yes/yes	yes/no	yes/yes	yes/yes	yes/yes	yes/yes	yes/yes	yes/yes	yes/no	yes/yes	yes/yes	yes/yes
<b>Native capacity</b>	Gen 3: 400 GB	Gen 4: 800 GB	Gen 3: 400 GB	Gen 4: 800 GB	Gen 3: 3.6 TB Gen 4: 7.2 TB	Gen 3: 9.6 TB Gen 4: 19.2 TB	Gen 3: 9.6 TB Gen 4: 19.2 TB	Gen 3: 19.2 TB Gen 4: 38.4 TB	Gen 3: 19.2 TB Gen 4: 38.4 TB	400 GB	800 GB	Gen 3: 158.4 TB Gen 4: 316.8 TB	Up to 5.5 PB
<b>Typical capacity<sup>2</sup></b>	Gen 3: 800 GB	Gen 4: 1600 GB	Gen 3: 800 GB	Gen 4: 1600 GB	Up to 14.4 TB	Up to 38.4 TB	Up to 38.4 TB	Up to 76.8 TB	Up to 76.8 TB	800 GB	1600 GB	Up to 633.6 TB	Up to 11 PB

Entry-level (cont'd)/Midrange Tape Products

	 Entry-level Tape Drives				 Entry-level Tape Libraries					 Midrange Tape Drives		 Midrange Tape Libraries	
	TS2230	TS2240	3580	TS2340	TS2900	TS3100	TS3100	TS3200	TS3200	TS1030	TS1040	TS3310	TS3500
<b>Native performance</b>	Gen 3: 60 MBps	Gen 4: 120 MBps	Gen 3: 80 MBps	Gen 4: 120 MBps	Up to 120 MBps	Up to 120 MBps	Up to 240 MBps	Up to 240 MBps	Up to 480 MBps	80 MBps	120 MBps	Up to 2.16 GBps	Up to 23 GBps
<b>interface</b>	LVD SCSI, 3 Gbps SAS	3 Gbps SAS	LVD SCSI	LVD SCSI, 3 Gbps SAS	3 Gbps SAS	4 Gbps FC 3 Gbps SAS LVD SCSI	3 Gbps SAS LVD SCSI	4 Gbps FC 3 Gbps SAS LVD SCSI	3 Gbps SAS LVD SCSI	4 Gbps FC	4 Gbps FC	4 Gbps FC 3 Gbps SAS LVD SCSI	4 Gbps FC
<b>Supported tape libraries</b>	NA	NA	NA	NA	N/A	N/A	NA	NA	NA	TS3500	TS3500	NA	NA
<b>Platform support<sup>4</sup></b>	System p, System i, System x, Microsoft Windows, HP-UX, Sun Solaris, Linux	System p, System x and others supporting 3 Gbps attach	System p, System i, System x, Microsoft Windows, HP-UX, Sun Solaris, Linux	System p, System i, System x, Microsoft Windows, HP-UX, Sun Solaris, Linux	System p, System x and other supporting 3 Gbps attach	System p, System i, System x, Microsoft Windows, HP-UX, Sun Solaris, Linux	System p, System i, System x, Microsoft Windows, HP-UX, Sun Solaris, Linux	System p, System i, System x, Microsoft Windows, HP-UX, Sun Solaris, Linux	System p, System i, System x, Microsoft Windows, HP-UX, Sun Solaris, Linux	System p, System i, System x, Microsoft Windows, HP-UX, Sun Solaris, Linux	System p, System i, System x, Microsoft Windows, HP-UX, Sun Solaris, Linux	System p, System i, System x, Microsoft Windows, HP-UX, Sun Solaris, Linux	System p, System i, System x, Microsoft Windows, HP-UX, Sun Solaris, Linux
<b>Application support<sup>5</sup></b>	A, B, C, D, E, F, G, H, J, L, M	A (others in plan)	A, B, C, D, E, F, G, H, J, L, M, N <sup>6</sup>	A (others in plan)	A (others in plan)	A, B, C, D, E, F, G, H, J, L, M, N <sup>6</sup>	A, B (others in plan)	A, B, C, D, E, F, G, H, J, L, N <sup>6</sup>	A, B (others in plan)	A, B, C, D, E, F, G, H, J, L <sup>7</sup>	A (others in plan)	A, B, C, D, E, F, G, H, J, L <sup>7</sup>	A, B, C, D, E, F, G, H, J, L <sup>7</sup>
<b>Media</b>	Refer to Tape Media, page 8	Refer to Tape Media, page 8	Refer to Tape Media, page 8	Refer to Tape Media, page 8	Refer to Tape Media, page 8	Refer to Tape Media, page 8	Refer to Tape Media, page 8	Refer to Tape Media, page 8	Refer to Tape Media, page 8	Refer to Tape Media, page 8	Refer to Tape Media, page 8	Refer to Tape Media, page 8	Refer to Tape Media, page 8
<b>Warranty period</b>	3 years <sup>8</sup>	3 years	3 years <sup>8</sup>	3 years <sup>8</sup>	1 year <sup>8</sup>	3 years <sup>8</sup>	3 years <sup>8</sup>	3 years <sup>8</sup>	3 years <sup>8</sup>	1 year	1 year	1 year	1 year
<b>Warranty type</b>	CRU	CRU	CRU	CRU	CRU	CRU	CRU	CRU	CRU	Onsite Repair (24x7)	Onsite Repair (24x7)	Next Business Day (9x5)	Onsite Repair (24x7)

F/W = Fast/Wide, Diff = Differential, N/A = Not Applicable, FC = Fibre Channel, X = Extended length cartridge, IOE = IBM Onsite Exchange, CRU = Customer Replaceable Unit  
**NOTES 1:** Max number of cartridges decreases as tape drives are added. **2:** Typical compression for open system environments is 2:1 (user results may vary) **4:** Also includes selected IBM xSeries®, IBM Netfinity®, IBM System i, IBM AS/400® and IBM System p servers. System z support for Linux only **5:** Refer to [http://www-03.ibm.com/systems/support/storage/config/ssic/displaysearchwithoutjs.wss?start\\_over=yes](http://www-03.ibm.com/systems/support/storage/config/ssic/displaysearchwithoutjs.wss?start_over=yes) for current application support **6:** In most countries **7:** The following vendors provide application support to the platforms defined above: A = IBM Tivoli® Storage Manager, B = Symantec Veritas NetBackup, C = Symantec Veritas Backup Exec, D = EMC Legato NetWorker, E = CA BrightStor ARCserve Backup, F = HP OpenView Storage Data Protector, G = CommVault Galaxy, H = BakBone NetVault, I = LSC, J = IBM BRMS, K = IBM OnDemand, L = Help/Systems Robot/Save, M = LXI Media Management, N = Dantz.

Midrange/Enterprise Tape Products



	Tape Drive	Tape Drive	Tape Controller	Tape Library		Tape Virtualization	Enterprise Tape Virtualization
	3592	3592	3592	3577	3584	ProtectTIER Appliance	Virtualization Engine
<b>Product</b>	TS1130	TS1120	TS1120	TS3400	TS3500	TS7650	TS7530
<b>Machine Type</b> model	3592 E06 EU6	3592 E05	3592 C06	3577 L5U	3584 L23 D23 S24	3958 AP1	3954 CV7 (requires additional machine types and models)
<b>Product strengths</b>	Multiplatform support High performance High capacity Data protection	Multiplatform support High performance High capacity Data protection	System z attachment of TS1130 and TS1120 drives High performance	Compact format Operates in library or autoloader mode	Multiplatform support Advanced management Scalable High Density (HD) Slot Technology	Eliminates redundant data by up to a factor of 25:1	Reduces backup window Reduces recovery time High capacity
<b>Number of drives</b>	1	1	1-12	1-2	1-192	Up to 256	Up to 1024 (1 node)* Up to 4096 (4 node)*
<b>WORM/Encryption</b>	yes/yes	yes/yes	yes/yes	yes/yes	yes/yes	no/no	no/yes
<b>Number of cartridges</b>	NA	NA	NA	18	6260 <sup>2</sup>	Up to 500,000	Up to 64,000 (1 node)* Up to 256,000 (4 node)*
<b>Native capacity</b>	60/100/128 GB (JJ/JR media) 300/500/640 GB (JA/JW media) 700 GB/1 TB (JB/JX media)	60/100 GB (JJ/JR media) 300/500 GB (JA/JW media) 700 GB (JB/JX media)	NA	Up to 18 TB	Up to 6.2 PB	Up to 36 TB useable	Up to 1.7 PB
<b>Typical capacity<sup>1</sup></b>	384 GB with JJ/JR 1920 GB with JA/JW 3 TB with JB/JX	180/300 GB with JJ/JR 900/1500 GB with JA/JW 2.1 TB with JB/JX	NA	Up to 54 TB	Up to 18.6 PB	Up to 900 TB (nominal capacity based on a deduplication ration of 25:1)	Up to 1.7 PB Up to 2.6 PB
<b>Native performance</b>	Up to 160 MBps	Up to 104 MBps	Varies <sup>8</sup>	Up to 320 MBps	Up to 30.7 GBps	Up to 500 MBps	Up to 4.8 GBps
<b>Interface</b>	4 Gbps	4 Gbps FC	4 Gbps FC	4 Gbps FC	4 Gbps FC	4 GBps FC	4 Gbps FC
<b>Supported tape library</b>	TS3400, TS3500, 3494***	TS3400, TS3500, 3494***	TS3400, TS3500, 3494***	NA	NA	NA	TS3500, TS3310, TS3200, TS3100, 3494***
<b>Platform support<sup>6</sup></b>	System p, System i, System x, System z; Microsoft Windows; HP-UX; Sun Solaris; Linux	System p, System i, System x, System z; Microsoft Windows; HP-UX; Sun Solaris; Linux	System p, System i, System x, System z; Microsoft Windows; HP-UX; Sun Solaris; Linux	System p, System i, System x, System z; Microsoft Windows; HP-UX; Sun Solaris; Linux	System p, System i, System x, System z; Microsoft Windows; HP-UX; Sun Solaris; Linux	System p, System i, System x, Microsoft Windows; HP-UX; Sun Solaris; Linux	System p, System x, System z <sup>10</sup> , System i <sup>11</sup> ; Microsoft Windows; HP-UX; Sun Solaris; Linux
<b>Application support<sup>6</sup></b>	A B C D E G	A B C D E F G H J L <sup>7</sup>	A B C D E F G H J L <sup>7</sup>	A B C D E J	See drive	A, B	A, B
<b>Media</b>	Refer to Tape Media, page 8	Refer to Tape Media, page 8	NA	Refer to Tape Media, page 8	Refer to Tape Media, page 8	NA	NA
<b>Warranty period</b>	1 year	1 year	1 year	1 year	1 year	1 year	1 year
<b>Warranty type</b>	Onsite Repair (24x7)	Onsite Repair (24x7)	Onsite Repair (24x7)	Onsite Repair (24x7)	Onsite Repair (24x7)	Onsite Repair (24x7)	Onsite Repair (24x7)

\* Virtual resource specification  
 \*\* for data replication only  
 \*\*\* Product withdrawn from marketing

F/W = Fast/Wide, Diff = Differential, N/A = Not Applicable, FC = Fibre Channel, X = Extended length cartridge, IOE = IBM Onsite Exchange, CRU = Customer Replaceable Unit  
 NOTES 1: Typical compression for mainframe environments is 3:1; 2:1 for open systems (user results may vary) 2: Max number of 3592 cartridges decreases as tape drives are added 3: IBM AIX 4.1.5 or later. 4: Load and search only 5: Server platforms with SAN-ready attachability, model- and feature-dependent. 6: The latest ISV support can be found in the connectivity section at <http://www-03.ibm.com/systems/storage/tape/library.html#compatibility>. 7: The following vendors provide application support to the platforms defined above: A = IBM Tivoli Storage Manager, B = Symantec Veritas NetBackup, C = Symantec Veritas Backup Exec, D = EMC Legato NetWorker, E = CA BrightStor ARCserve Backup, F = HP OpenView Storage Data Protector, G = CommVault Galaxy, H = BakBone NetVault, I = LSC, J = IBM BRMS, K = IBM OnDemand, L = Help/Systems Robot/Save, M = LXI Media Management. 8: Performance varies by environment 10: Applies to Linux on System z using FC 11: Requires RPQ 12: EE = Enterprise Edition LE = Limited Edition

## Enterprise Tape Products



	Enterprise Tape Virtualization		
	Virtualization Engine	ProtectTIER Gateway	
<b>Product</b>	TS7720	TS7740	TS7650G
<b>Machine Type model</b>	<b>3957</b> VEA (requires additional machine types and models)	<b>3957</b> VO6 (requires additional machine types and models)	<b>3958</b> DD3
<b>Product strengths</b>	Increases performance Scalable Large cache for fast recall	Increases performance Scalable Helps reduce cost	Eliminates redundant data by up to a factor of 25:1
<b>Number of drives</b>	NA	Up to 128* Up to 768* (3 site GRID)	Up to 256 (1 node)* Up to 512 (clustered)*
<b>WORM/Encryption</b>	no/no	no/yes	no/no
<b>Number of cartridges</b>	Up to 1,000,000*	Up to 1,000,000*	Up to 500,000 (1 node)* Up to 1,000,000 (clustered)*
<b>Native capacity</b>	Up to 70 TB Up to 210 TB (3 site GRID)	Up to 14 TB Up to 42 TB (3 site GRID)	Up to 1 PB, 2 PB clustered
<b>Typical capacity<sup>1</sup></b>	Up to 210 TB Up to 630 TB (3 site GRID)	Up to 42 TB Up to 126 TB (3 site GRID)	Up to 1 PB, 2 PB clustered
<b>Native performance</b>	Up to 600 MBps	Up to 600 MBps	Up to 500 MBps, 1000 MBps clustered
<b>Interface</b>	4 Gbps FC	4 Gbps FC	4 Gbps FC
<b>Supported tape library</b>	NA	TS3500, 3494***	NA
<b>Platform support<sup>6</sup></b>	System z	System z	System p, System i, System x, Microsoft Windows; HP-UX; Sun Solaris; Linux
<b>Application support<sup>6</sup></b>	E	E	A, B
<b>Media</b>	NA	NA	NA
<b>Warranty period</b>	1 year	1 year	1 year
<b>Warranty type</b>	Onsite Repair (24x7)	Onsite Repair (24x7)	Onsite Repair (24x7)

## Other Backup Tape Products



	Tape Drives			
	7206-336	7207	7212	7214
<b>Product</b>	DAT72 Tape Drive	SLR60 Tape Drive	Device Enclosure*	Device Enclosure*
<b>Machine Type model</b>	<b>7206</b> 336-DDS Gen 5	<b>7207</b> 330	<b>7212</b> 103	<b>7214</b> 1U2
<b>Product strengths</b>	Cost-effective streaming tape drive	Backward read/write compatible with System i internal	Rack-mountable 2-drive enclosure utilizes only 1U (1.75") of space	Rack-mountable 2-drive enclosure utilizes only 1U (1.75") of space
<b>Number of drives</b>	1	1	1-2	1-2
<b>Max number of cartridges</b>	1	1	2	2
<b>Cartridge capacity native/compressed</b>	36/72 GB	330: 30/60 GB	DVD: Variable (FC1103) DAT72: 36/72GB (FC1105) SLR60: Variable (FC1107) SLR100: Variable (FC1108) HHLT02: 200/400 GB (FC1109)	DVDRAM: Variable (FC1420) DVDROM: Variable (FC1421) DAT72: 36/72 GB (FC1400) DAT160 80/160 GB (FC1401) HHLT04 800 GB/1.6 TB (FC1404)
<b>Max drive data rate<sup>1</sup> native/compressed</b>	336: 3/6 MBps	330: 4/8 MBps	DDS/DAT72: 3/6 MBps HHLT02: 30/60 MBps	DAT72 3/6 MBps DAT160 6.9/13.8 MBps HHLT04 120/40 MBps
<b>Interface</b>	SCSI-2 F/W SE, LVD/SE	SCSI-2 SE, ULTRA, LVD/SE, 160/320	SCSI-3 ULTRA, LVS, 160/320	3 Gbps SAS
<b>Platform support<sup>6</sup></b>	System p	System p, System i	System p, System i, IBM Power Systems	IBM Power Systems
<b>Media</b>	Refer to Tape Media, page 8	Refer to Tape Media, page 8	Refer to Tape Media, page 8	Refer to Tape Media, page 8
<b>Warranty period</b>	1 year	1 year	1 year	1 year
<b>Warranty type</b>	Onsite Repair (24x7)	Onsite Repair (24x7)	Onsite Repair (24x7)	Onsite Repair (24x7)

\* 7212-103 and 7214-1U2 also offer DVD-ROM and DVD-RAM optical drives  
For most current information, visit: [ibm.com/servers/storage/tape/compatibility/index.html](http://ibm.com/servers/storage/tape/compatibility/index.html)

**Diff** = Differential, **N/A** = Not Applicable, **FC** = Fibre Channel, **X** = Extended length cartridge, **IOE** = IBM Onsite Exchange, **CRU** = Customer Replaceable Unit  
**NOTES 1:** Compressed data rates are estimates and are data-, application- and processor-dependent. User results may vary. **3:** Server platforms with SAN-ready attachability, model- and feature-dependent. **6:** The following vendors provide application support to the platforms defined above: **A** = IBM Tivoli Storage Manager, **B** = Symantec Veritas NetBackup, **C** = Symantec Veritas Backup Exec, **D** = EMC Legato NetWorker, **E** = CA BrightStor ARCserve Backup, **F** = HP OpenView Storage Data Protector, **G** = CommVault Galaxy, **H** = BakBone NetVault, **I** = LSC, **J** = IBM BRMS, **K** = IBM OnDemand, **L** = Help/Systems Robot/Save, **M** = LXI Media Management, **N** = Dantz.

Selecting a Solution

	Solution	Native Performance	Capacity*	System z	System p	System i**	System x	Open Systems***
Entry tape products	3580 tape drive	120 MBps	1600 GB	Yes	Yes	Yes	Yes	Yes
	TS2900 tape autoloader	120 MBps	Up to 14.4 TB	Yes	Yes	Yes	Yes	Yes
	TS3100 tape library	120 MBps	Up to 38.4 TB	Yes	Yes	Yes	Yes	Yes
	TS3100 tape library with HH drives	240 MBps	Up to 38.4 TB	Yes	Yes	Yes	Yes	Yes
	TS3200 tape library	240 MBps	Up to 76.8 TB	Yes	Yes	Yes	Yes	Yes
	TS3200 tape library with HH drives	480 MBps	Up to 76.8 TB	Yes	Yes	Yes	Yes	Yes
Midrange tape products	TS1040 tape drive	120 MBps	1600 GB	Yes	Yes	Yes	Yes	Yes
	TS3310 tape library	Up to 2.16 GBps	Up to 633.6 TB	Yes	Yes	Yes	Yes	Yes
	TS3500 tape library	Up to 23 GBps	Up to 11 PB	Yes	Yes	Yes	Yes	Yes
Enterprise tape products	TS1130 tape drive	Up to 160 MBps	3000 GB	Yes	Yes	Yes	Yes	Yes
	TS1120 tape drive	Up to 104 MBps	2100 GB	Yes	Yes	Yes	Yes	Yes
	TS1120 tape controller	Up to 230 MBps	NA	Yes	No	No	No	No
	TS3400 tape library	Up to 320 MBps	Up to 54 TB	Yes	Yes	Yes	Yes	Yes
	TS3500 tape library	Up to 30.7 GBps	Up to 18.6 TB	Yes	Yes	Yes	Yes	Yes
Tape Virtualization	TS7520**	Up to 4.8 GBps	Up to 2.6 PB	Yes	Yes	Yes	Yes	Yes
	TS7530	Up to 600 MBps	Up to 210 TB	Yes	No	No	No	No
	TS7740	Up to 600 MBps	Up to 42 TB	Yes	No	No	No	No
Other backup products	7206-336	Up to 3 MBps	72 GB	Yes	Yes	Yes	No	No
	7206-VX2	Up to 6 MBps	60 GB	Yes	Yes	Yes	No	No
	7206-VX3	Up to 24 MBps	160 GB	Yes	Yes	Yes	No	No
	7207-330	Up to 4 MBps	60 GB	Yes	Yes	Yes	No	No
	7212-103	Up to 12 MBps	320 GB	Yes	Yes	Yes	No	No

\* Compressed; see [ibm.com/storage](http://ibm.com/storage) for specific capacities.

\*\* Available on System i through AIX/Linux partitioning.

\*\*\* See [ibm.com/storage](http://ibm.com/storage) for specific open systems connectivity.



IBM Systems

Demand for lightning-fast communication and transactions has driven the need for a high-performance, responsive infrastructure that embraces open standards—exactly what you will find in the IBM Systems product portfolio. Investments in servers often result in demands on disk and tape storage systems. IBM has a family of storage offerings that complements the IBM Systems product portfolio. There is no better storage offering for IBM Systems than an IBM System Storage product. These offerings are tested and supported by IBM and are backed by outstanding IBM service and support.

IBM Business Partner Innovation Centers (BPIC)

More than 140 worldwide IBM TotalStorage Solution Centers can deliver one-stop shopping for storage hardware, software and consulting services. The Solution Centers offer you both a local venue for hands-on testing of IBM storage solutions and a platform for proof-of-concept and benchmarking activities. These centers also work with the leading storage software providers to support a wide variety of choices for interoperability. IBM Business Partners will help you select and implement a solution to help your business succeed in today's dynamic marketplace. Visit: [ibm.com/storage/tssc](http://ibm.com/storage/tssc)



[ibm.com/storage](http://ibm.com/storage)

## IBM Global Services for System Storage and Storage Networking

Data Storage Services from IBM can help you achieve business objectives by creating cost-effective data storage solutions that address the requirements of key business applications. These solutions can support multiple platforms and product vendors, helping to provide enhanced protection for critical business data, increased asset utilization, availability and reliability levels with reduced management costs.

IBM Global Services, as the leading data storage services provider, brings best practices from its thousands of customer engagements to work with your employees to integrate new solutions and technology with your business and IT needs. IBM offers a comprehensive portfolio of data storage services including:

- Assess**
  - Analysis of enterprise information needs and environment
  - Defined enterprise-wide storage strategies
  - Quantified business benefits
- Plan**
  - Backup/restore and business continuity planning
  - Performance and capacity planning
  - Enterprise security architecture
  - Storage migration and consolidation
- Design**
  - Networked storage architecture design
  - SAN configuration and integration services
  - Proof of concept, validation and certification
- Implement**
  - Implementation, testing and migration services
  - Education and training
  - Installation, relocation, cabling and site preparation
- Run**
  - Business and application recovery services
  - Systems monitoring and management
  - Managed Storage Services

IBM Global Services has a track record in offering services for open and mainframe storage, data migration, installation and support services for IBM and non-IBM environments. Some examples are:

- IBM Storage Strategy Assessment assists with the vision and strategy, assessment, architecture and conceptual designs to help customers optimize their storage infrastructure to new architectures.
- IBM Planning Services for 3494 Automated Tape Library and Virtual Tape Server can help improve tape storage management and gain control of an often expanding library of tapes.
- IBM Operational Support Services for Tivoli Storage Manager assists customers in the planning and implementation of storage management software.
- IBM Managed Storage Services offer scalable, cost-effective storage capacity, management and backup/restore services on a usage basis.

More information about IBM storage services can be found at [ibm.com/services/storage](http://ibm.com/services/storage).

## IBM Global Financing

### Financing that supports throughout the technology life cycle

IBM Global Financing can help you accelerate your acquisitions of the latest technology and services, and help make your IT and information infrastructure projects more affordable by providing competitive, customized financing of your storage, server, PC, software and services investments. In addition, IBM Global Financing can also enable you to reduce technology obsolescence risk and handle planning for disposal and replacement of your IT hardware assets. With single-source, customized, competitive financing of the entire life cycle of your IT equipment, it is easier to manage both the up-front investment and the ongoing operating costs.

From acquisition through daily use, buyback and disposal, our end-to-end offerings form the foundation of a cohesive technology management strategy, improve asset management and increase your flexibility in small and large IT projects.

Offerings, rates, terms and availability may vary by country. Contact your local IBM representative or visit the Web at [ibm.com/financing](http://ibm.com/financing)

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