IBM Systems and Technology Group

# IBM System Storage Product Guide

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## Cost effective and reliable access to your information

People need access to information so they can make knowledgeable decisions that lead to growth and increased profitability. Your challenge is making sure that information is always available, when and where it is needed, to fuel the cycle of creative thinking that leads to innovation.

IBM System Storage™ solutions help you more successfully support your business by creating IT environments that:

- Protect information assets and enable data sharing and collaboration across your enterprise in real time
- More easily handle changing business requirements
- Manage information effectively by matching the value of your information to how it is stored and accessed at each point in its life cycle

Only IBM delivers the depth and breadth of intelligent storage solutions and expertise to help you reliably bring information to people in a cost-effective way.

## Empower your people to innovate and make more informed business decisions

Innovate faster and help ensure that the information that fuels creative thinking and decision making is available in real time with IBM System Storage solutions.

- Automate and simplify IT operations with revolutionary IBM System Storage solutions—so you can focus on your business and spend less time managing your infrastructure
- Increase your return on people and create an environment for competitive advantage by capitalizing on data sharing and collaboration across the enterprise in real time with IBM System Storage offerings
- Fuel your innovation engine with complete solutions that leverage IBM's unmatched expertise, strong synergy between servers and storage, award-winning storage software and extensive partner network

## Get the most value from your information

Protect and fully leverage your information assets by using intelligent management solutions from IBM—solutions that enable your IT staff to implement the most cost-effective storage options based on the value and service level of the information at each point in its lifecycle.

- Align your storage investment with the value of your information using comprehensive tiered storage, policy-based automation and intelligent information management solutions from IBM
- Confidently protect your strategic information assets and efficiently comply with regulatory and security requirements with the unrivaled breadth of storage solutions from IBM

## Make your business more responsive with an information-centric IT environment

Manage and adapt to growing and changing business needs with an IT environment that makes critical information always available—without disruption.

- Keep your business running with continuous access to information through industry-leading business continuity solutions from IBM System Storage
- Rapidly adapt to evolving business needs by creating an open, flexible, on demand infrastructure that scales as you grow—without disrupting ongoing operations—using proven IBM System Storage solutions
- Optimize and protect your IT investment with marketplace-leading virtualization capabilities, superior multivendor interoperability and cost-effective storage solutions from IBM

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## Entry-level/Midrange Tape Products

| | Entry-level Tape Drives | | | Entry-level Tape Libraries | | | | Midrange Tape Drives | | Midrange Tape Libraries | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **TS2230** | **3580** | **TS2340** | **TS3100** | **TS3100** | **TS3200** | **TS3200** | **TS1030** | **TS1040** | **TS3310** | **TS3500** |
| **Product Name** | 3580 | 3580 | 3580 | 3573 L2U | 3573 L2 3573 L4U U featuring Ultrium 3 Half-High | 3573 L4U | 3573 L4U featuring Ultrium 3 Half-High | 3588 | 3588 | 3576 | 3584 |
| **Machine Type** model | **H3L** | **3580** L33 | **L43** **S43** | **3573** L2U and PNs 3573L3S, 3573F3S, 3573L4S, 3583F4S, 3583S4S | **3573** PNs 3573L32, 3573S32 | **3573** L4U and PNs 3573L3H, 3573F3H, 3573L4H, 3573F4H, 3573S4H | **3573** PNs 3573L34, 3573S34 | **3588** F3B | **F4A** | **3576** L5U E9U | **3584** L53 D53 |
| **Product strengths** | Multiplatform support Half-high form factor Lower entry price | Multiplatform support Backward read capable to LTO1 Max performance for LTO3 | 3 Gbit SAS attachment Encryption capable Multiplatform support High performance High capacity | multiplatform support high performance high capacity | multiplatform support, same capacity as full high at a lower price | multiplatform support high performance high capacity | multiplatform support, same capacity as full high at a lower price | multiplatform support high performance high capacity | multiplatform support high performance high capacity data protection | multiplatform support high performance high capacity | multiplatform support high performance high capacity |
| **Number of drives** | 1 | 1 | 1 | 1 | 1 or 2 LTO Gen 3 half-high | 1–2 | 1–4 LTO Gen 3 half-high | 1 | 1 | 1–18 | 1–192 |
| **Max number of cartridges** | 1 | 1 | 1 | 24 | 24 | 48 | 48 | NA | NA | 396 | 6,887[1] |
| **WORM/ Encryption** | yes/no | yes/no | yes/yes | yes/yes | yes/no | yes/yes | yes/no | yes/no | yes/yes | yes/yes | yes/yes |
| **Native capacity** | Gen 3: 400 GB | Gen 3: 400 GB | Gen 4: 800 GB | Gen 3:9.6 TB Gen 4: 19.2 TB | up to 9.6 TB | Gen 3: 19.2 TB Gen 4: 38.4 TB | up to 19.2 TB | 400 GB | 800 GB | Gen 3: 158.4 TB Gen 4: 316.8 TB | up to 5.5 PB |
| **Typical capacity[2]** | Gen 3: 800 GB | Gen 3: 800 GB | Gen 4: 1600 GB | Up to 38.4 TB | up to 19.2 TB | Up to 76.8 TB | up to 38.4 TB | 800 GB | 1600 GB | up to 633.8 TB | up to 11 PB |
| **Native performance** | Gen 3: 60 MBps | Gen 3: 80 MBps | Gen 4: 120 MBps | 120 MBps | up to 120 MBps | up to 240 MBps | up to 240 MBps | 80 MBps | 120 MBps | 21.6 GBps | up to 23 TBps |
| **Interface** | 160 Mbps SCSI | 160 MBps SCSI | 4 Gbps FC 3 Gbps SAS | 4 Gbps FC 3 Gbps SAS LVD SCSI | 3 Gbps SAS LVD SCSI | 4 Gbps FC 3 Gbps SAS LVD SCS | 3 Gbps SAS LVD SCSI | 4 Gbps FC | 4 Gbps FC | 4 Gbps FC 3 Gbps SAS LVD SCSI | 4 Gbps FC SCSI-LVD |
| **Supported tape libraries** | NA | NA | NA | | NA | NA | NA | TS3500 | TS3500 | NA | NA |
| **Platform support[4]** | 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 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 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 |
| **Application support[5]** | A, B, C, D, E, F, G, H, J, L, M | A, B, C, D, E, F, G, H, J, L, M, N[7] | A (others in plan) | A, B, C, D, E, F, G, H, J, L, M, N[7] | B (others in plan) | A, B, C, D, E, F, G, H, J, L, N[7] | B (others in plan) | A, B, C, D, E, F, G, H, J, L[7] | A (others in plan) | A, B, C, D, E, F, G, H, J, L[7] | A, B, C, D, E, F, G, H, J, L[7] |
| **Media** | 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 |
| **Warranty period** | 3 years[6] | 3 years[6] | 3 years[6] | 3 years[6] | 3 years[6] | 3 years[6] | 3 years[6] | 1 year | 1 year | 1 year | 1 year |
| **Warranty type** | 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®, Netfinity, IBM System i, IBM AS/400® and IBM System p servers. System z support for Linux only **5:** Refer to **ibm.com**/storage/tape/compatibility 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.

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## Enterprise Tape Products

| | Tape Drive | Tape Controller | Tape Library | | Tape Virtualization | | |
|---|---|---|---|---|---|---|---|
| | **3592** | **3592** | **3577** | **3584** | **Virtualization Engine** | | |
| **Product Name** | TS1120 | TS1120 | TS3400 | TS3500 | TS7510 | TS7520 | TS7740 |
| **Machine Type** model | **3592**<br>E05 | **3592**<br>C06 | **3577**<br>L5U | **3584**<br>L23<br>D23 | **3954**<br>CV5 (requires additional machine types and models) | **3954**<br>CV6 (requires additional machine types and models) | **3957**<br>V06 (requires additional machine types and models) |
| **Product strengths** | multiplatform support<br>high performance<br>high capacity<br>data protection | System z attachment of TS1120 drives<br>high performance | compact format<br>operates in library or autoloader mode | multiplatform support<br>advanced management<br>scalable | reduces backup window<br>reduces recovery time<br>augments native tape | reduces backup window<br>reduces recovery time<br>high capacity | increases performance<br>scalable<br>reduces cost |
| **Number of drives** | 1 | 1–12 | 1–2 | 1–192 | up to 512 (1 node)*<br>up to 1,024 (2 node)* | up to 1024 (1 node)*<br>up to 4096 (4 node)* | up to 128*<br>up to 768* (3 site GRID) |
| **WORM/ Encryption** | yes/yes | yes/yes | yes/yes | yes/yes | no/yes** | no/yes | no/no |
| **Number of cartridges** | NA | NA | 18 | 6260[2] | up to 4,096 (1 node)*<br>up to 8,192 (2 node)* | up to 64,000 (1 node)*<br>up to 256,000 (4 node)* | up to 1,000,000* |
| **Native capacity** | 60/100 GB (JJ/JR media)<br>300/500 GB (JA/JW media)<br>700 GB (JB/JX media) | NA | up to 1.8 TB<br>up to 9 TB<br>up to 12.6 TB | up to 626 TB<br>up to 3.1 PB<br>up to 4.3 PB | up to 23 TB (1 node)<br>up to 46 TB (2 node) | up to 884 TB EE[12]<br>up to 19.5 TB LE[12] | up to 6 TB<br>up to 18 TB (3 site GRID) |
| **Typical capacity**[1] | 180/300 GB with JJ/JR<br>900/1500 GB with JA/JW<br>2.1 TB with JB/JX | NA | up to 5.4 TB<br>up to 27 TB<br>up to 37.8 TB | up to 1.87 PB<br>up to 9.3 PB<br>up to 13.1 PB | up to 46 TB (1 node)<br>up to 92 TB (2 node) | up to 884 TB EE[12]<br>up to 1.76 PB | up to 18 TB<br>up to 54 TB (3 site GRID) |
| **Native performance** | up to 104 MBps | Varies[8] | up to 208 MBps | up to 104 MBps | up to 600 MBps | up to 4.8 GBps | up to 600 MBps |
| **Interface** | 4 Gbps FC | 4 Gbps FC | 4 Gbps FC | 4 Gbps FC | 2 Gbps FC | 4 Gbps FC | 4 Gbps FC |
| **Supported tape library** | TS3400, TS3500, 3494*** | TS3500, 3494*** | NA | NA | TS3500, 3494*** | TS3500, TS3310, TS3200, TS3100, 3494*** | TS3500, 3494*** |
| **Platform support**[5] | 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 x, System z[10], System i[11]; Microsoft Windows; HP UX; Sun Solaris; Linux | System p, System x, System z[10], System i[11]; Microsoft Windows; HP UX; Sun Solaris; Linux | System z |
| **Application support**[6] | A B C D E F G H J L[7] | A B C D E F G H J L[7] | A B C D E J | See drive | A, B, D, E, F, H[7] | A, B | E |
| **Media** | Refer to Tape Media, page 8 | NA | Refer to Tape Media, page 8 | Refer to Tape Media, page 8 | NA | NA | NA |
| **Warranty period** | 1 year | 1 year | 1 year | 1 year | 1 year | 1 year | 1 year |
| | 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 **ibm.com**/storage/tape/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 FCP **11:** Requires RPQ

**12:** EE=Enterprise Edition LE=Limited Edition

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## Other Backup Tape Products

| | Tape Drives | | | | Optical | |
|---|---|---|---|---|---|---|
| | **7206-336** | **7206-VXA** | **7207** | **7212** | **7210** | **3996** |
| **Product Name** | DAT72 Tape Drive | VXA-2 Tape Drive | SLR60 Tape Drive | Device Enclosure* | DVD option | Library |
| **Machine Type** model | **7206**<br>336-DDS Gen 5 | **7206**<br>VX2, VX3 | **7207**<br>330 | **7212**<br>103 | **7210**<br>030 | **3996**<br>32, 80, 174 |
| **Product strengths** | Cost-effective streaming tape drive | Low-cost, high-capacity VXA-2 technology | Backward read/write compatible with System i internal | Rack-mountable 2-drive enclosure utilizes only 1U (1.75") of space | External deskside | Large scale optical |
| **Number of drives** | 1 | 1 | 1 | 1–2 | 1 | up to 4 |
| **Max number of cartridges** | 1 | 1 | 1 | 2 | 1 | up to 174 |
| **Cartridge capacity** native/ compressed | 36/72 GB | VX2: 80/160 GB<br>XV3: 160/320 GB | 330: 30/60 GB | DVD: Variable (FC1103)<br>VXA2: 80/160GB (FC 1104)<br>DAT72:36/72GB (FC1105<br>SLR60:Variable (FC1107)<br>SLR100:Variable (FC1108)<br>HHLTO2:200/400GB (FC1109)<br>XVA320 (FC1114) | 4.9/9.4 GB | 60 GB |
| **Max drive data rate**[1] native/ compressed | 336: 3/6 MBps | VX2: 6/12 MBps<br>VX3: 12/24 MBps | 330: 4/8 MBps | DDS/DAT72: 3/6 MBps<br>VXA: 12/24 MBps | NA | 12 MBps |
| **Interface** | SCSI-2 F/W SE, LVD/SE | SCSI-3 ULTRA, LVD/SE, 160/320 | SCSI-2 SE, ULTRA, LVD/SE, 160/320 | SCSI-3 ULTRA, LVS/SE, 160/320 | SCSI-3 ULTRA, LVD-SE, 160/320 | LVD SCSI, 160/320 |
| **Platform support**[3] | System p | System p, System i | System p, System i | System p, System i | System p, System i | System p, System i |
| **Media** | 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 |
| **Warranty period** | 1 year | 1 year | 1 year | 1 year | 1 year | 1 year |
| | Onsite Repair (24x7) | Onsite Repair (24x7) | Onsite Repair (24x7) | Onsite Repair (24x7) | CRU, Onsite Repair | Onsite Repair (9x5) |

* 7212-102 also offers DVD-ROM and DVD-RAM optical drives
For most current information, visit: **ibm.com**/servers/storage/tape/compatibility/index.html

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**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. **4:** Also includes selected System x, System i and System p. System z support for Linux only **5:** Refer to **ibm.com**/storage/tape/conntrix for current application support **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.

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## Selecting a Solution

| | Solution | Native Performance | Native Capacity* | System z | System p | System i** | System x | Open Systems*** |
|---|---|---|---|---|---|---|---|---|
| Entry tape products | 3580 tape drive | 120 MBps | 1600 GB | | | | | |
| | TS3100 tape library | 120 MBps | up to 35.2 TB | | | | | |
| | TS3100 tape library with HH drives | 60 MBps | up to 19.2 TB | | | | | |
| | TS3200 tape library | 240 MBps | up to 70.4 TB | | | | | |
| | TS3200 tape library with HH drives | 120 MBps | up to 38.4 TB | | | | | |
| Midrange tape products | TS1040 tape drive | 120 MBps | 1600 GB | | | | | |
| | TS3310 tape library | up to 21.6 GBps | up to 633.6 TB | | | | | |
| | TS3500 tape library | up to 23 TBps | up to 11 PB | | | | | |
| Enterprise tape products | TS1120 tape drive | up to 104 MBps | 2100 GB | | | | | |
| | TS1120 tape controller | up to 230 MBps | NA | | | | | |
| | TS3400 tape library | up to 208 MBps | up to 37.8 TB | | | | | |
| | TS3500 tape library | up to 19.2 TBps | up to 13.1 PB | | | | | |
| Tape Virtualization | TS7510** | up to 600 MBps | up to 92 TB | | | | | |
| | TS7520** | up to 4.8 GBps | up to 1.76 PB | | | | | |
| | TS7740 | up to 600 MBps | up to 54 TB | | | | | |
| Other backup products | 3996 | up to 12 MBps | 10.4 TB | | | | | |
| | 7206-336 | up to 3 MBps | 72 GB | | | | | |
| | 7206-VX2 | up to 6 MBps | 60 GB | | | | | |
| | 7206-VX3 | up to 24 MBps | 160 GB | | | | | |
| | 7207-330 | up to 4 MBps | 60 GB | | | | | |
| | 7212-103 | up to 12 MBps | 320 GB | | | | | |

* Compressed; see **ibm.com**/storage for specific capacities.

** Available on System i through AIX/Linux partitioning

*** See **ibm.com**/storage for specific open systems connectivity.

Yes No Partial

## IBM Systems

Customer demand for lightning-fast communication and transactions has driven the need for universal commitment to e-business. No matter what industry, or what size company, success today hinges on building 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 System Storage Proven Program Helps Simplify Interoperability

**Overview**

The IBM System Storage Proven™ program has been designed on a simple premise: give customers the ability to select the best combination of interoperable storage technologies to help minimize their investment risk, increase business efficiency and expedite their infrastructure implementation.

The IBM System Storage Proven program is all about leveraging IBM storage with business applications, ISV and Business Partner software, and market leading hardware components which together deliver solutions that address today's client needs.

**Customer Benefits**

Pre-qualified configurations

Customers will be better able to identify a variety of pre-qualified, interoperable storage elements. By taking pre-qualified applications and hardware and combining them with IBM storage technology a client can have an easier time identifying solutions that address their storage needs.

**IBM Business Partner Benefits**

Potential for reduced sales cycle and integration issues

For IBM Business Partners, the IBM System Storage Proven program is intended to help reduce the sales cycle and integration issues, allowing more time for higher margin customization. Another added value for IBM Business Partners is the interoperability qualification program where companies work together with IBM, which can help supports their ability to develop and deliver products or solutions that interoperate with the broad portfolio of IBM System Storage products.

Please visit the System Storage Proven Web site at **ibm.com**/storage/proven to view more than five hundred available products and solutions from over three hundred participating companies to meet your storage needs.

## IBM Business Partner Innovations 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

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## IBM Tivoli Storage Manager

| Function and Value | Highlights |
|---|---|
| IBM Tivoli Storage Manager is designed to provide protection of your 24x7 applications and key data in the event of hardware, software or network failures. It offers move-and-store techniques and policy-based automation, which are designed to work together to help increase data and application protection, decrease disaster recovery time and lower storage administration costs. It manages inactive data, helping you match the value of the data to the most cost-effective storage management practices. Tivoli Storage Manager is designed to scale easily to protect hundreds of computers running a dozen operating systems ranging from laptops to mainframes and connected together via the Internet, WANs, LANs or SANs. Tivoli Storage Manager also offers open, easy-to-use APIs designed to enable ISVs to more easily adapt their solutions to IBM software, helping to allow joint customers to customize, better secure and extend the functionality of their storage environment. | • Designed to protect valuable data in the most cost-effective manner<br>• Designed to archive inactive data to help reduce costs<br>• Designed to help ensure continuity and recovery |

## IBM Tivoli Storage Manager Extended Edition

## IBM Tivoli Storage Manager Express

## IBM TotalStorage Productivity Center

| Product | Function and Value | Highlights |
|---|---|---|
| **IBM TotalStorage Productivity Center for Disk** | In a pooled or virtualized SAN environment, multiple devices work together to create a storage solution. IBM TotalStorage Productivity Center for Disk is designed to provide integrated administration, optimization and replication features for these environments. | • Designed to help reduce the complexity and cost of storage management while improving data availability<br>• Offers centralized, open standards–based management of storage devices<br>• Designed to help enhance storage administrator productivity<br>• Offers proactive management of storage devices |
| **IBM TotalStorage Productivity Center for Replication** | TotalStorage Productivity Center For Replication is designed to simplify and automate the configuration of your replication environment allowing for more effective Metro Mirroring, Global Mirror and IBM FlashCopy management. It is also designed to monitor and automate copy operations across devices to support a replication environment. | • Automates the configuration of your IBM DS8000, DS6000™ and ESS advanced copy services features.<br>• Monitors and manages the IBM DS8000 and SVC copy operations to ensure successful completion from your source volumes to your disaster recovery volumes |

## IBM TotalStorage Productivity Center

| | | |
|---|---|---|
| **IBM TotalStorage Productivity Center for Replication Two Site Business Continuity** | TPC for Replication Two Site and Three Site Business Continuity provides disaster recovery management through planned and unplanned failover and failback automation for the IBM ESS Model 800, IBM DS6000 and IBM DS8000. | • TPC for Replication Two Site and Three Site Business Continuity helps you manage replication to a remote backup site(s) through Metro Mirror or Global Mirror. The software is designed to allow you to monitor the progress of the copy services so you can verify the amount of replication that has been done as well as the amount of time needed to complete the replication. Automated failover is designed to keep your critical data online and available to your users even if your primary site fails. When the primary site comes back on, the software manages failback to the default configuration as well. |
| **IBM TotalStorage Productivity Center for Data** | IBM TotalStorage Productivity Center for Data is a Storage Resource Management (SRM) tool for storage environments that provide a set of policy-driven automated tools for managing storage capacity, availability, events, performance and assets, including DAS, NAS and SAN technologies. | • Designed to help leverage and optimize existing storage resources and perform storage management with a high level of control<br>• Designed to help maximize storage utilization<br>• Designed to be able to manage more storage with the same staff |

## IBM TotalStorage Productivity Center

| | | |
|---|---|---|
| **IBM TotalStorage Productivity Center for Fabric** | IBM TotalStorage Productivity Center for Fabric is designed to help automate the management of heterogeneous storage networks and works with a broad range of devices, so businesses can leverage and better use existing technology investments. It is designed to provide comprehensive management of physical and logical configurations for multi-vendor SANs with automatic resource discovery, event monitoring and alerting, zone control and SAN error-prediction capabilities. | • Designed to help predict storage network failures before they happen, enabling preventative maintenance<br>• Designed to help accelerate problem isolation when failures occur<br>• Designed to create a single point of control, administration and security for the management of heterogeneous storage networks |
| **IBM TotalStorage Productivity Center Standard Edition** | Combines Disk, Data and Fabric components together as one orderable product. | • Having Disk, Data and Fabric allows higher levels of value—i.e. combined SAN and Disk performance reports or automated workflows to do provisioning (under the control of Tivoli Provisioning Manager) |

## IBM Global Services for System Storage and Storage Networking

Data Storage Services from IBM can help companies achieve their 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

**Des gn**
- 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.

## IBM Global Financing

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MB, GB and TB equal 1,000,000, 1,000,000,000 and 1,000,000,000,000 bytes, respectively, where referring to storage capacity. Actual storage capacity will vary based upon many factors and may be less than stated. Some numbers given for storage capacities give capacity in native mode followed by capacity using data compression technology.

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