

IBM TOTALSTORAGE CUSTOMER SUPPORT PLAN

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Purpose of Support Plan

Do you need a concise, up-to-date guide to IBM services and support for storage? This Customer Support Plan distills information about base services/support, e-support for storage hardware and software, problem-reporting procedures (including), plus IBM Global Services offerings for storage. The document concludes with IBM TotalStorage URLs and support phone numbers.

NOTE:

To download the latest version of this document, go to <http://www.ibm.com/support/> then search under Technical Support using "customer support plan" (quotation marks included) in the search field.

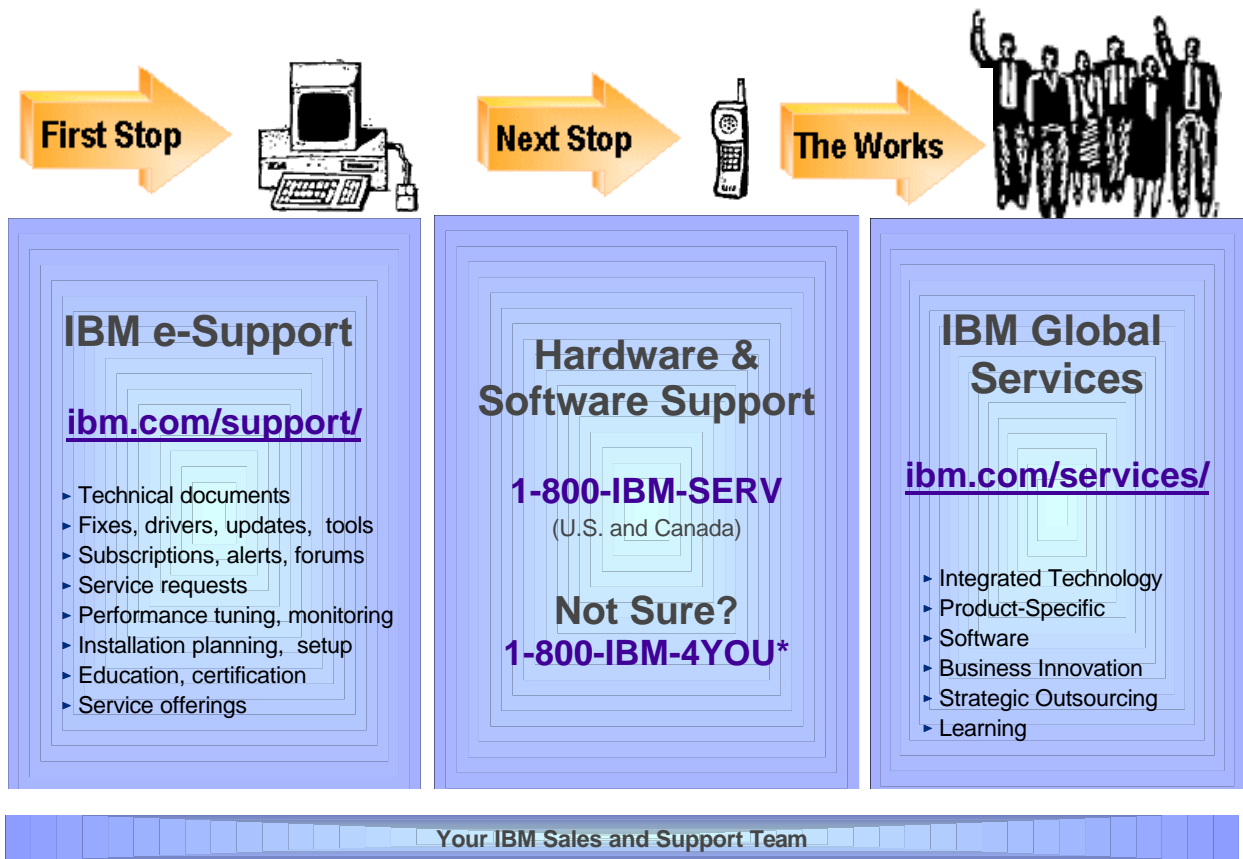
11/1/2002

Support Overview for IBM TotalStorage

From IBM's very largest customer to the individual consumer, the Web (<http://.ibm.com>) is key to enabling e-relationships. Customers use the Web to learn about and buy offerings and solutions, to comparison shop, check on order status, and to invoke / receive after-purchase support and services. This is referred to as the *Learn / Shop / Buy / Receive / Use* cycle.

IBM also delivers technical sales support via the Web to allow customers to *Learn / Shop / Buy* in a self-service mode, without requiring assistance from the IBM sales channels or Technical Sales Support organizations. These activities can be end-to-end Web or Web-assisted, where the customer accomplishes some tasks via the web and then engages skilled resources.

As an IBM customer, you have access to a range of technical support unmatched in the industry. IBM TotalStorage offerings and solutions come with the service and support you expect, giving you enhanced value and confidence. Below is a bird's-eye view of IBM's customer support capability:



Base Services and Support

When you buy new IBM systems, you also buy IBM's unique depth of experience and expertise. You buy support from people dedicated to developing systems solutions for your business. As always, you can access a wide variety of technical support for your purchase -- free of charge.

Before you decide on any purchase, you can use a wealth of technical sales support, delivered both via the web and through your sales and technical team. We want to ensure that our solutions and offering address your business requirements. To help you learn about our offerings and make a purchase decision, we offer the following kinds of support:

- ◆ Offering technical content, such as white papers, model comparisons, and specifications
- ◆ Trial software downloads
- ◆ Offering and solutions demonstrations and seminars (including webinars)
- ◆ Identification and selection of appropriate solutions, including:
 - wComplex solution design and assistance
 - wOffering configurations
 - wBasic capacity plans
 - wSolution Assurance reviews for new IBM offerings to assure the solution both addresses your business needs and is technically feasible
 - wEducation and education planning assistance

Once you have decided on a storage offering, you can take advantage of the significant technical support we offer to help you install and implement your solution, including:

- ◆ Web self-service such as hints and tips, usage information, fixes, and downloads
- ◆ Installation planning assistance for new software licenses
- ◆ Physical planning and installation planning assistance
- ◆ Warranty support of IBM hardware
- ◆ Repair of IBM hardware engineering and manufacturing defects
- ◆ Base Software Support included with your software offering license

wBase software support for most System/390 offerings includes problem support for suspected defects in IBM code and publications. Support is by fax, mail, telephone (voice), and electronic access (bulletin boards).

wBase software support for IBM and Lotus' AS/400, RS/6000, and desktop platform products includes reporting and defect resolution for IBM code and publications. Support is by fax, mail, and electronic access where available.

wA complete discussion of IBM/Lotus/Tivoli software support is at

<http://ps.software.ibm.com/pbin-usa-ps/getobj.pl?/pdocs-usa/webhndbk.html>

NOTE: This document contains representative lists only of the services and support available from IBM. For further information on services and support available, see <http://www.ibm.com/services/> or call 1-800-IBM-4YOU.



IBM has received the National Medal of Technology -- which recognizes lasting contributions to competitiveness and embodies technological innovation for the company's leadership in developing and commercializing data storage technology.

Your first stop for IBM support . . . e-support

IBM delivers world-class storage support. We furnish you with the technical information and tools to help support a buying decision as well as help you get maximum value from your current storage products. Our technical support portal -- <http://www.ibm.com/support> -- offers you self-service 24 x 7 x 365 -- with its powerful, cross-IBM offering knowledge base. The portal also posts hot links to all of IBM offering support Web sites, including storage e-support at <http://www.storage.ibm.com/techsup.htm>



- ◆ Technical content
- ◆ Fixes, drivers, updates, tools
- ◆ Subscriptions, alerts
- ◆ Service requests
- ◆ Performance tuning, monitoring
- ◆ Installation planning, setup
- ◆ Education, certification
- ◆ Service offerings

e-support for TotalStorage Hardware

<http://ssddom02.storage.ibm.com/techsup/webnav.nsf/support/home>

Find it first on the web!

We furnish you with the technical information and tools to help maintain your current storage hardware / software or support a buying decision.

The list below shows what's available from the storage support home page:

Hardware Support

- ◆ Technical support for:
 - w Hard disk drives
 - w Disk systems
 - w Tape and optical
 - w Storage software
 - w SAN
 - w NAS
 - w iSCSI
- ◆ StorageSmart products for OEM, Resellers, and System Integrators
- ◆ Storage media
- ◆ OEM MR (magneto-resistive) head support
- ◆ IBM server support

PASSPORT/Advantage PMR Electronic Incident Submission System

Redbooks ("How-to" books on technical topics)

Storage Management Software Support

IBM Global Services: TotalStorage Services

Other Services

- ◆ Education
- ◆ Customer financing
- ◆ *iSource*, our customizable, one-stop source for IBM information



e-Support for Storage Software

<http://ssddom02.storage.ibm.com/techsup/webnav.nsf/support/storsw>


Resolve your storage software problems quickly and independently using **timesaving online tools** that allow you to:

- ◆ Search for reported problems
- ◆ Download product fixes
- ◆ Report problems (or update an existing problem report)
- ◆ Order a fix
- ◆ Read related helpful information

Don't overlook Redbooks!

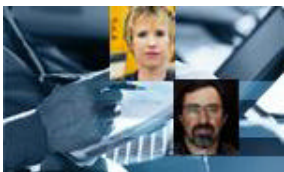
IBM Redbooks are "how-to" guides to technical information, and *Redbooks Online!* is THE web source for finding complete information on IBM products and offerings. You can view and download complete books. We also offer two ways to find the Redbook you are looking for. Do a quick keyword search for a hit list of IBM Redbooks, Redpieces, and Redpapers. Or browse through pre-selected categories.

See <http://www.redbooks.ibm.com/>



The screenshot shows the IBM Redbooks website interface. At the top is the Redbooks logo. Below it, there are several sections: 'Featured' with a 'Registration required!' notice and a small image of a person; 'Recent Redpieces' with a link to 'Integrating XML with DB2 XML'; 'Recent Redbooks' with links to 'Getting the Most From Your Dc' and 'Linux on IBM Netfinity Servers'; 'Keep informed' with a globe icon and text about e-mail subscription; and 'Featured Events and Other News' with links to 'Tips for reading IBM Redbooks' and 'Did you ever wonder who write:'.

Residencies



IBM Redbooks are developed through a unique program -- the Residency -- that teams IBM technical professionals with Business Partners, customers, and IBM product development staff. Depending on the market needs of a product or solution, a team of residents is chosen through a competitive nomination process and works at one of the IBM International Technical Support Organization (ITSO) centers for two to eight weeks, devoted to developing an IBM Redbook.

The intensive, multi-week residency is where small teams explore and document (via a Redbook) a product's implementation, integration and operations -- often in the context of marketplace solutions. ITSO residencies apply leading-edge information technology to customer needs. If you are interested in participating in a residency, you can get more information from the IBM Redbook home page -- <http://www.redbooks.ibm.com/>

Ordering Redbooks and Other Publications

Many publications are available free online. You may view or download these titles without having to place them in a shopping cart and without providing any information about yourself.

To order hard copy publications for a fee, however, you will be asked to provide your name, address, e-mail address, and credit card information. This information allows your IBM Publications Center search results to display prices in your local currency. If available in stock, your order will be dispatched within 8-14 days by surface delivery, without additional cost.

See <http://www.elink.ibm.link.ibm.com/public/applications/publications/cgibin/pbi.cgi?CTY=US>

Quick Publication Ordering System search

Begin your IBM Publication Ordering System (POS) search by using one or more keywords. You can type (parts of) a publication title and description keywords, and publication numbers. At the bottom of this page provide additional search functionality to the IBM Publications Center.

Search on

Publication number - - (xxxx-xxxx-xx)

List

- All publications
- Only orderable publications
- Only online publications (read/download)

*"IBM ... continues to leverage its strengths as the most recognized brand in IT and as **the company that can offer the greatest depth and breadth of service to customers.** IBM -- and only IBM -- can offer service, support and integration capabilities to almost any enterprise almost anywhere in the world, and those capabilities are an even more important competitive differentiator in difficult economic times." "Gartner Viewpoint" (www.cnet.com) 12.10.2001*

If you don't find what you need with e-support, your next stop should be 1-800-IBM-SERV for hardware support

Your first call will connect you to your IBM Remote Technical Support Center Representative. This Representative will help diagnose your hardware problem and, if not resolved, will create a plan to resolve it, including recommending parts (if appropriate) to the IBM System Services Representative (SSR) responsible for supporting your IBM hardware. You can reach Hardware Support at **1-800-IBM-SERV**. The Service Delivery Manager or Duty Manager can assist you with any service issues.

Call the numbers below for hardware support on the following products:

Brocade: 1-800-IBM SERV (2109 SAN Fibre Channel Switch)

INRANGE: 1-800-657-6897 (2042 INRANGE Fibre Channel Director)

McDATA: 1-800-752-4572 (2031 McDATA Fabric and Loop Switches; 2032 McDATA Fibre Channel Director)

If you need software support, call the same number -- 1-800-IBM-SERV

Your call to Software Support gives us the opportunity to consistently meet your expectations by providing:

- ◆ Rapid response to your requests
- ◆ Fast relief for high impact problems
- ◆ Timely problem resolution
- ◆ High quality fixes and information
- ◆ Up-to-date service and installation information

NOTE: To be eligible for voice support on most software offerings, you must have either a Support Line or Passport/Advantage contract. (See page 9 for a list of IBM Global Services offerings.)

You are a valued customer. If, for any reason, we are not meeting your expectations, please call us.

- ◆ Duty Manager -- (US) **1-800-237-5511** or (CAN) **1-800-IBM-SERV**
- ◆ Integrated Technology Services Sales -- (US) **1-888-426-4343 (option 3)** or (CAN) **1-800-426-2255**

When you're not sure, call 1-800-IBM-4YOU

If you encounter a problem of unknown origin, contact your Remote Technical Support Specialist by calling the Hardware or Software Support numbers listed above or call our general information number -- **1-800-IBM-4YOU**. Call between 8AM - 7PM EST, 7AM - 7PM CST, and 5AM - 7PM PST.

Problem Resolution Using Severity Codes

The severity codes below determine how IBM escalates hardware and software problems. Report a severity code when placing the initial service request to the IBM Support Center.

Severity 1— CRISIS

- ◆ The system (or a major application or component) goes down, critically impacting a customer's ability to do acceptable business.
- ◆ No bypass alternatives are available.
- ◆ Severity 1 requires total commitment of equipment and personnel by the customer and vendors to resolve the problem. The respective management groups are responsible for assigning personnel.

Severity 2 — MAJOR

- ◆ A problem that causes a severe operational impact.
- ◆ Bypassing the problem is possible but not feasible.
- ◆ Severity 2 requires that the failing component be made available for repair.

Severity 3 — MINOR

- ◆ Any problem causing restricted function or minor impact on performance.
- ◆ Bypassing the problem is both possible / feasible.
- ◆ Deferred maintenance may be acceptable.

Severity 4 — BYPASSED

- ◆ A circumvented problem.
- ◆ The problem's impact is non-critical and does not affect operation.
- ◆ Deferred maintenance is acceptable.

IBM TotalStorage -- Services Overview

What kinds of services are available for your IBM storage products?

Infrastructure & Systems Management	<ul style="list-style-type: none"> ◆ Testing Services for SAN
Networking & Connectivity	<ul style="list-style-type: none"> ◆ Fibre Transport Services
Technical Support	
<ul style="list-style-type: none"> ◆ Installation Services 	<ul style="list-style-type: none"> ◆ Geographically Dispersed Parallel Sysplex for Extended Remote Copy ◆ IBM 3583 Ultrium Scalable Tape Library on Host Server or Storage Area Network (SAN) ◆ SANergy ◆ Midrange Server SAN
<ul style="list-style-type: none"> ◆ Migration Services 	<ul style="list-style-type: none"> ◆ S/390-attached IBM TotalStorage Servers ◆ Open system-attached IBM TotalStorage Servers ◆ Virtual Tape Server (VTS) for New Allocations ◆ Virtual Tape Server for Static Data
<ul style="list-style-type: none"> ◆ Software Support Services 	<ul style="list-style-type: none"> ◆ S/390 SoftwareXcel http://www.ibm.com/services/its/us/mus19d1.html ◆ Support Line http://www.ibm.com/services/its/us/mus62d1.html ◆ Consult Line http://www.ibm.com/services/its/us/consline2.html ◆ S/390 Alert http://www.ibm.com/services/its/us/mus16d1.html ◆ S/390 Resolve http://www.ibm.com/services/its/us/mus23d1.html
<ul style="list-style-type: none"> ◆ Implementation Services 	<ul style="list-style-type: none"> ◆ IBM Implementation Services for Enterprise Storage Server Copy Services ◆ Automated Tape Library Implementation Services ◆ Virtual Tape Server (VTS) Implementation Services
<ul style="list-style-type: none"> ◆ Operational Support Services 	<ul style="list-style-type: none"> ◆ 3494 Automated Tape Library with Virtual Tape Server ◆ ADSM for SAP ◆ Tivoli Storage Manager ◆ Tivoli Storage Manager for Domain Resource Manager (DRM) ◆ Tivoli Storage Manager for Network Storage Manager (NSM) ◆ Performance Management and Capacity Planning Services for Tivoli ADSM

Please refer to <http://www.ibm.com/services/its/us/storage.html> for details on these and other services offerings. You may also call ITS Services at (US) 1-888-426-4343, option 2; (CAN) 1-800-426-2255.

Other IBM Global Services for Storage

Support Line (remote technical support from IBM Global Services)



With enhanced Support Line, any of your IS technical support personnel gain quick telephone and electronic access to our services specialists -- who can answer product-specific questions about installing and operating disk, tape, Storage Area Network (SAN), Network-Attached Storage (NAS), iSCSI, and storage software.

Support Line offers **flexible coverage alternatives** ranging from support for a single operating system to coverage for your entire enterprise.

Basic prime shift support includes coverage during normal business hours, Monday through Friday, excluding national holidays.

The full shift coverage option allows you to select 24-hours a day, 7-days a week coverage. Support coverage for customers' mission-critical problems is available 24 hours per day, 7 days per week, in the base support contract. This support is available for an additional fee in some countries.

For details, see

<http://www-1.ibm.com/services/its/us/mus62d1.html>

Software Services

<http://www.ibm.com/services/its/us/swsupport.html>

or **(US) 1-888 426-4343, option 3**
(CAN) 1-800-426-2255

- ◆ Self Help
- ◆ Base Support (support included with the License Charge)
- ◆ Enhanced Support
- ◆ IBM Support Family of Services
- ◆ Planning Services
- ◆ SmoothStart
- ◆ Account Advocate
- ◆ Advanced Support
- ◆ Passport Advantage
- ◆ Tivoli Maintenance and Support

Support Line enhancements:

- Support Line now offers just two procurement options:
 - User-selected "Support Groups," which provide support for from one to several collections of products, usually centered around operating systems.
 - "Enterprise Support," which covers all designated products across the enterprise.
- Some support groups now contain both selected hardware and software products.
- Any of your IS technical support personnel may contact IBM for support, eliminating the need for named callers.
- Support procurement is simplified with fewer Support Line procurement options and elimination of product groups.

Learning Services

<http://www.ibm.com/services/learning/>

or 1-800-IBM-TEACH

- ◆ World's largest IT training provider
- ◆ Delivers thousands of courses daily in 55 countries

Fibre Array Storage Technology (FAStT)

IBM FAStT products are a set of storage area networks (SAN) building blocks. They provide scalability to accommodate the storage needs of a growing business while supporting storage consolidation for SAN, NAS, and direct-attach environments. They are designed for high availability with dual redundant components, multiple RAID levels, logical unit number masking, and enhanced management options.

Support for your FAStT product can be obtained by calling the 1-800-IBM-SERV support number. When calling for support, be sure you know your machine type and serial number. Valid machine types are:

FAStT 200	FAStT 500	FAStT 700
3542 - 1RU	3552 - 1RU	1742 - 1RU
3542 - 2RU		

For “how-to” support on the FAStT products (including Storage Management software), you will need a SAN/NAS Support Line contract. The FAStT Supported Servers Matrices can be found at the following site: <http://www.storage.ibm.com/hardsoft/disk/fastt/supserver.htm>

IBM Implementation Services for IBM TotalStorage FAStT products

IBM can provide implementation services for IBM TotalStorage FAStT products to plan, install, and configure the IBM FAStT500 or IBM FAStT700 (“controllers”) and the IBM EXP500 or the IBM EXP700 (“storage units”). By taking advantage of this service, your equipment will be up and running smoothly and quickly with limited interruption to your business. For more information on these and other services, contact your IBM representative.

IBM Storage Consulting Services are also available to assist with the development of a storage infrastructure to support your business objectives. These services can help your organization in establishing interoperable, multivendor storage architectures and proper systems management. For information on consulting services, visit: <http://www.ibm.com/services/>

Network Attached Storage (NAS)

Network Attached Storage devices are high-performance storage appliances that provide shared data to clients and other servers on a Local Area Network (LAN).

If you find that you need warranty, start-up, or maintenance support on a NAS appliance, you will need to call the IBM service support number, 1-800-IBM-SERV, and give the machine type and serial number.

NAS appliances are ordered by a system type number which may be composed of several machine components. Each machine component has its own machine type. You will need to input the **machine type** and the **serial number** when placing a call to support.

If you do not know your machine type or are unable to locate it on the appliance, please refer to the Storage Networking Technical Support page at:

<http://ssddom02.storage.ibm.com/techsup/webnav.nsf/support/nas> From this page, double click on your system type and model. You'll see the table of machine types associated with your product.

As a supplement to the normal support structure, our **SAN Central** support team provides problem determination at the storage network level. This support includes storage area networking (SAN) hardware, network attached storage (NAS) hardware, and storage-related software. The **SAN Central** group is invoked by the product-specific support groups. They may engage whatever support and development teams are needed to isolate and fix a problem.

IBM Installation Services for IBM TotalStorage NAS products

IBM provides installation services for IBM TotalStorage network attached storage (NAS) equipment that is designed for customer setup. Taking advantage of this service means that, with limited interruption to your business, your equipment will be up and running smoothly and quickly. For more information on these and other installation services, visit the following web site:

<http://www-1.ibm.com/services/its/us/installation.html>

IBM TotalStorage Consulting Services helps develop a storage infrastructure to support your business objectives. These services can help your organization establish interoperable, multivendor storage architectures and proper systems management. For information on consulting services, visit:

<http://www-1.ibm.com/services/>

IBM URLs

Corporate Home Page	http://www.ibm.com/
Business Continuity and Recovery Services	http://www.ibm.com/services/continuity/recover1.nsf
Global Financing	http://www.ibm.com/financing/webprod.nsf/ID/778AA4
Global Services Consulting	http://www.ibm.com/services/
Operating Systems Home Page	http://www.ibm.com/software/os/
Redbooks	http://www.redbooks.ibm.com/
Shop IBM	http://commerce.www.ibm.com/

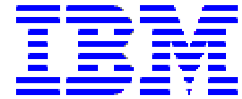
IBM TotalStorage URLs

IBM TotalStorage Home Page	http://www.storage.ibm.com/
DFSMS Family of Products	http://www.storage.ibm.com/software/sms/smsHOME.htm
Disk Systems Home Page	http://www.storage.ibm.com/hardsoft/disk/disk.htm
Removable Media Storage Home Page	http://www.storage.ibm.com/hardsoft/tape/index.html
Storage Area Networks (SANs)	http://www.storage.ibm.com/ibmsan/index.htm
SAN Software	http://www.storage.ibm.com/ibmsan/products/sansoftware.htm
SAN Services	http://www.ibm.com/services/its/us/san2.html
Storage Software Home Page	http://www.storage.ibm.com/software/index.htm
IBM Global Services for Storage	http://www.ibm.com/services/its/us/storage.html
Technical Support	http://www.storage.ibm.com/techsup.htm
Technical Support Directory (Global)	http://www.ibm.com/planetwide/
Technical Support Directory (US)	http://www.ibm.com/planetwide/us/

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Phone Directory of IBM Support



Customer Service Center **1-800-IBM-4YOU (426-4968)**

- A single point of contact if you do not know who to call at IBM
- Provides assistance and information on IBM products and services, seminars and classes, marketing assistance, and more

IBM Global Services' Integrated Technology Services (ITS) Sales .. **(US) 1-888-426-4343**
..... **(CAN) 1-800-426-2255**

- Can help you create systems, networks, and application infrastructures that support e-business on demand networked functionality.
- Includes IT planning, implementation, support and management services to help you maximize performance and availability, improve productivity, reduce cost and increase the value of your IT investments.

IBM Learning Services **1-800 IBM-TEACH (426-8322)**

- To receive information and/or enroll, call between 7 AM - 7 PM CST Monday - Friday.

Software Technical Support Center **1-800-IBM-SERV (426-7378)**

- Serves as the primary contact for software problem reporting
- Accepts calls for software technical support covered by an: IBM Licensing Agreement or Support Contract
- Notifies local IBM assistance if customer requests to contact them

Hardware Technical Support Center **1-800-IBM-SERV (426-7378)**

- Serves as the primary contact for hardware problem reporting
- Accepts calls for repairing hardware covered by an IBM Maintenance Agreement or Support Contract
- Notifies local IBM management if customer requests to contact them

Publication Orders and SLSS Support **(US) 1-800-879-2755**
..... **(CAN) 1-800-IBM-4YOU**

- To order publications or to receive System Library Subscription Service (SLSS)