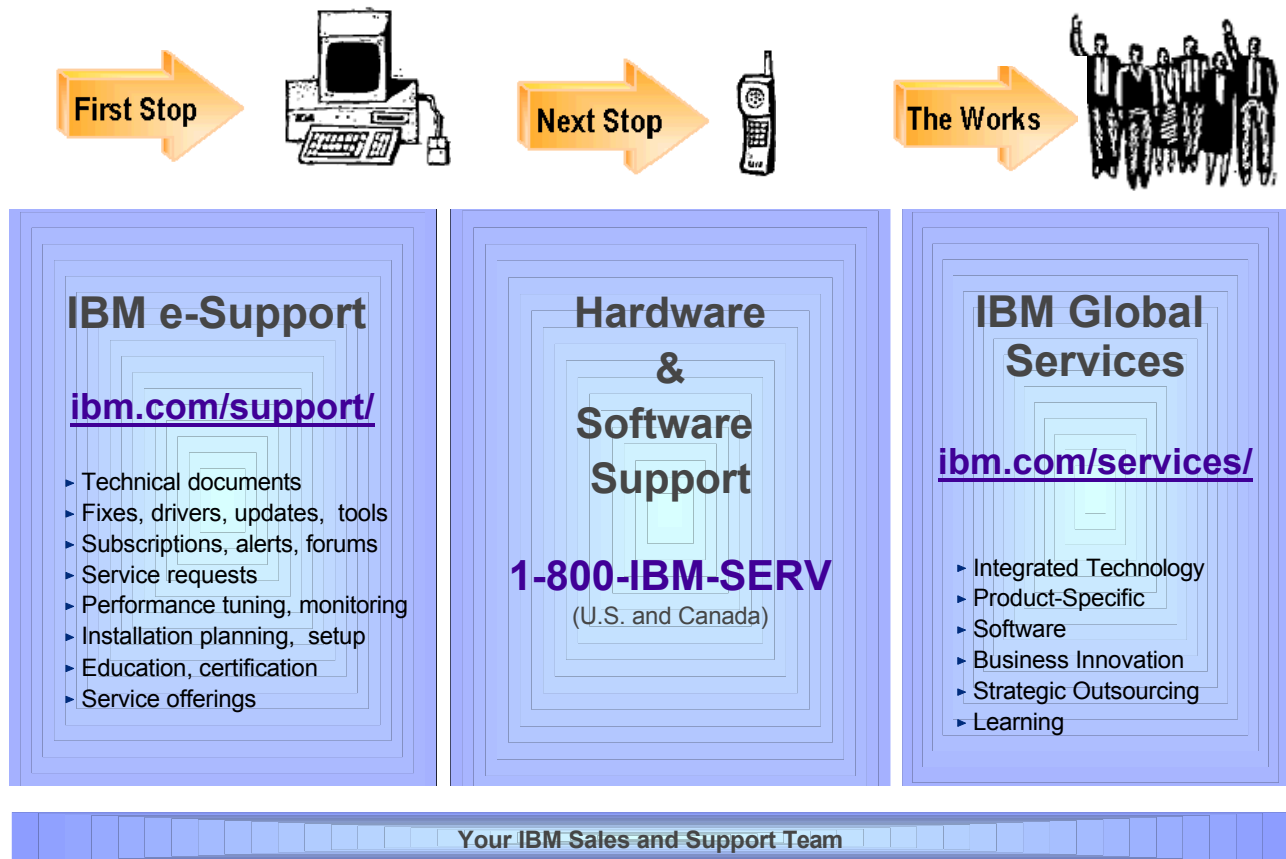# CUSTOMER SUPPORT PLAN

Prepared for :

This document communicates IBM
technical support available to you,
the procedures for obtaining support,
and information on contacting IBM.

You will find information on IBM
e-support, hardware and software
reporting procedures, escalation
processes (including a chart
defining severity levels),
team members' roles and responsibilities,
as well as information available by phone.

Overview of IBM Support Structure

From IBM's very largest customer to the individual consumer, the Web (http://ibm.com/support) is key to enabling e-relationships any time, day or night. Below is a bird's-eye view of IBM's customer support structure:

First Stop

Next Stop

The Works

IBM e-Support

ibm.com/support/

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

Hardware & Software Support

1-800-IBM-SERV
(U.S. and Canada)

IBM Global Services

ibm.com/services/

- ► Integrated Technology
- ► Product-Specific
- ► Software
- ► Business Innovation
- ► Strategic Outsourcing
- ► Learning

Your IBM Sales and Support Team

"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" (http://www.cnet.com) 12.10.2001

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

http://techsupport.services.ibm.com/

Our technical support portal offers you **self-service 24 x 7 x 365**, with its powerful, cross-IBM offering knowledge base.

Use this site as your starting point to find tools and resources that help you streamline the technical planning and support for your IBM eServer. It's support at your fingertips -- from planning to education to installation to maintenance, and everything in between.

You will find important support and reference information such as:

- Planning
- Problem Solving
- Fixes
- Documentation
- Education
- Services
- and much more...
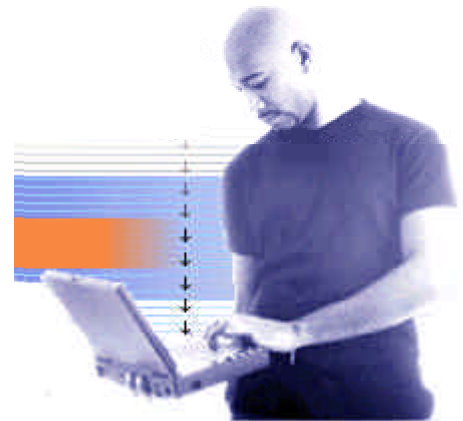
iSource -- Your Customizable, One-Stop Source for IBM Information

With *iSource* from IBM, you get only the updated information about the industry news, e-business, and IBM product information that's important to you. Best of all, there is no charge for this service. *iSource* uses your own selections to customize the e-mail you receive from IBM. You can change your preferences whenever you please, and never have to worry about information overload. Major news categories include announcement letters, *Focusing on You,* special promotions, news digest, and press releases. To receive *iSource*, simply sign up -- at http://isource.ibm.com/world/index.shtml

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 solutions and offerings. View and download complete books. Find the Redbook you want one of two ways: 1) do a quick keyword search for a hit list of IBM Redbooks, Redpieces, and Redpapers or 2) browse through preselected categories. See 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.

Quick Publication Ordering System search

Begin your IBM Publication Ordering System (POS) search by using
You can type (parts of) a publication title and description keywords,
at the bottom of this page provide additional search functionality to

Search on [   ]

Publication number [   ]-[   ]-[   ] (xxxx-xxxx-xx)

List
○ All publications
◉ Only orderable publications
○ Only online publications (read/download)

[Start search] [Help] [Advanced POS]

IBM Public Information and Services Main Menu:

See http://www2.ibmlink.ibm.com/cgi-bin/master?xh=SWH9RFBnfE88R02USenGnI9332&request=text&parms=mainPage.txt&xhi=&xfr=F

Residencies

IBM Redbooks are developed through a unique program -- the Residency -- that teams IBM technical professionals with IBM Business Partners, customers, and IBM product development staff. These residents are chosen through competitive nomination, and develop an IBM Redbook while working at one of the IBM International Technical Support Organization (ITSO) centers for two to eight weeks.

This intensive residency is where small teams explore and document (via a Redbook) a product's implementation, integration, and operations -- applying leading-edge information technology to customer needs. If you are interested in participating in a residency, see IBM Redbook home -- http://www.redbooks.ibm.com

IBMLink

Electronic Service and Support for your eServers available at http://www.ibm.com/ibmlink/

- **InfoLink** - Sales Manual, announcements, and catalogs

- **OrderLink** - Configurators, prices, and schedules

- **ServiceLink** - Problem resolution, Q&A, and preventive service

- **UserFunctions** - Guide, profiles, notes, and forms

IBM^â TotalStorage^â e-Support

Hardware Support Home Page for TotalStorage

http://www-1.ibm.com/servers/storage/support/index.html

Here you'll find information related to hardware support, services, technical resources, and other links

About FAStT...

For our FAStT products, you should consider using **IBM Implementation Services**. By taking advantage of these services, your equipment will be up and running smoothly and quickly with limited interruption to your business. You can find more information on this service at: http://www-1.ibm.com/services/its/us/drmjgd17.html For information on other storage services, contact your IBM representative or access http://www-1.ibm.com/services/us/index.wss/it/its/a1000416

For **"how-to" support on the FAStT products** (including Storage Management software), you will need a Support Line contract. For a list of the products supported via Support Line, visit: http://www-1.ibm.com/services/sl/products/

For more information on **Support Line**, go to: http://www-1.ibm.com/services/its/us/supportline.html

The **FAStT Supported Servers Matrices** can be found at the following site: http://www.storage.ibm.com/disk/fastt/supserver.htm

About SVC and SIS...

The **SAN Volume Controller (2145)** and **SAN Integration Server (2146)** are comprised of many components. Support for certain aspects of each product are covered under Software Maintenance (SWMA). However, to have complete coverage -- including usage and how-to questions -- for the total virtualization solution, you will need a Support Line contract. Check the links above for more information on Support Line and the Supported Product List.

IBM Implementation Services are also available for SVC and SIS. These services are designed to assist you in planning and configuring the IBM TotalStorage SAN Volume Controller and SAN Integration Server. Including IBM Implementation Services in your solution will help ensure a quick and smooth implementation. For information on these services, visit:

http://www-1.ibm.com/services/its/us/totalstoragevolume.html or
http://www-1.ibm.com/services/its/us/totalstorageserver.html or call: **1-888-426-4343**

Software Support Home Page for TotalStorage

http://www-1.ibm.com/servers/storage/support/software/index.html
From this page, you'll have access to: Management Toolkits, product information, and information about software entitlement.

Support for Hardware, Software, and "Don't Know"

If you don't find the <u>hardware information</u> that you need with e-Support, call IBM Service at 1-800-IBM-SERV

Your first call will connect you to your IBM® Remote Technical Support Center Representative, who 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.

> **BEFORE YOU CALL . . .**
> To help technicians more quickly determine and resolve your problem, please have your :
>
> * **Machine Type**   * **Model number**
> * **Serial number**   * **BIOS revisions (if**
> * **Other pertinent info**   **appropriate)**
>
> **PLEASE:**
> **Record your tracking number (PMR or PMH)**
> Support staff can dispatch a hardware Customer Service Representative if necessary.

Escalation:

The National Duty Manager is responsible for providing IBM management support for the delivery of maintenance and services to IBM customers on a 24 hour basis 365 days of the year. The NDM is responsible for service delivery outside of normal business hours, and manages alerts and critical situations to ensure efficient and effective coordination of available resources. The NDM responds to escalations from customers and IBM personnel, providing assistance and situation management as needed. The National Service Delivery Manager can be reached at **1-800-IBM-SERV**.

Don't know? Call 1-800-IBM-4YOU

If you encounter a problem of unknown origin, contact your Remote Technical Support Specialist by calling the support number listed above or call our general information number **1-800-IBM-4YOU between 7am - 10pm EST.** You are a valued customer. If, for any reason, we are not meeting your expectations, please call the **Duty Manager --** (US and CAN) 1-800-IBM-SERV or **Integrated Technology Services Sales --** (US) 1-888-426-4343 (option 3) *or* (CAN) 1-800-426-2255.

Problem Resolution Using Severity Codes
The severity codes below determine how IBM escalates problems. Report a severity code when placing the initial service request call.

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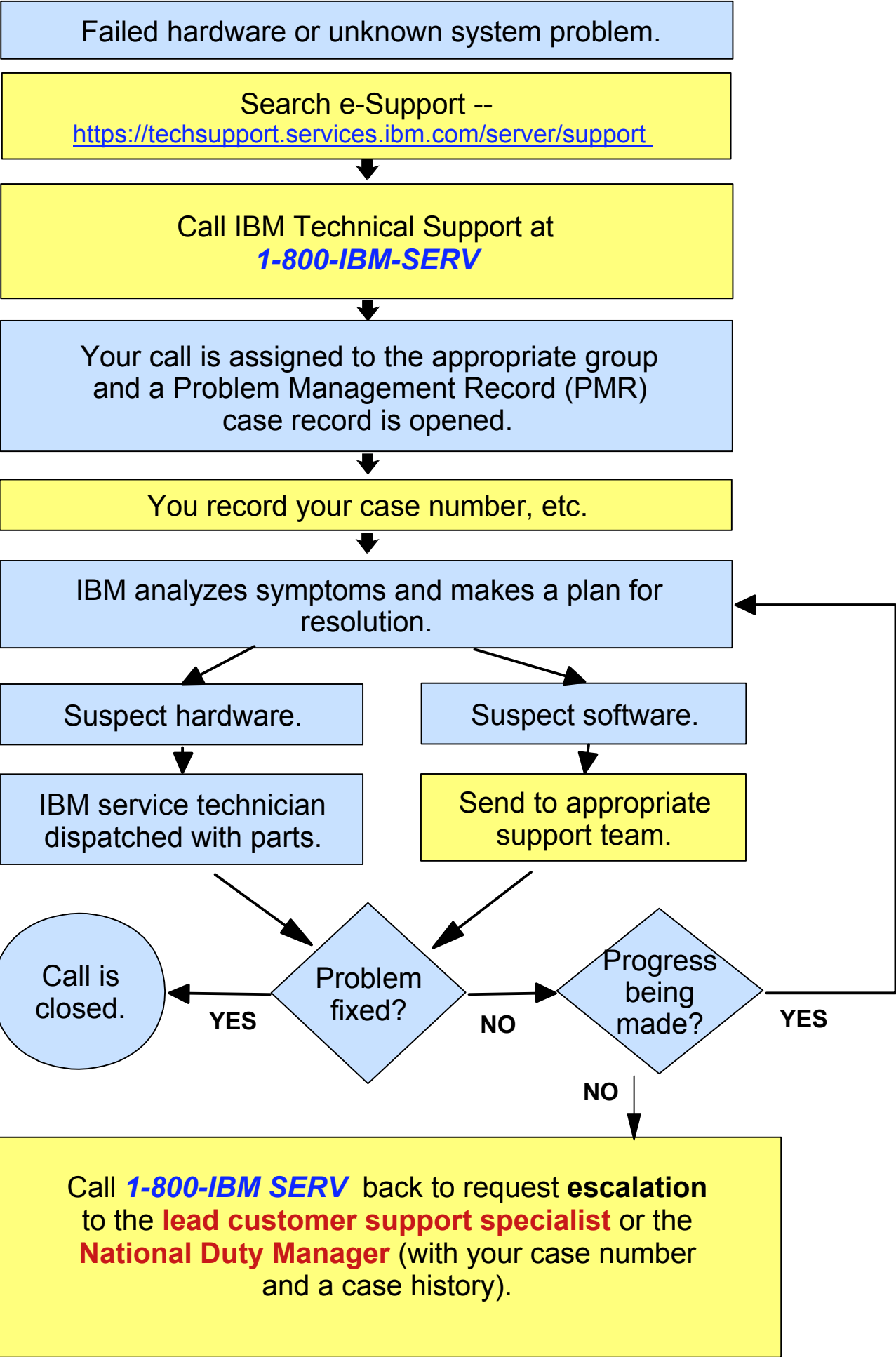
Severity 2 — MAJOR
* *A problem that causes a severe operational impact.*
* *Bypassing the problem is possible but not feasible.*
* *Severity 2 requires that the failing component be made available for repair.*

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.*

Failed hardware or unknown system problem.

Search e-Support --
https://techsupport.services.ibm.com/server/support

Call IBM Technical Support at
1-800-IBM-SERV

Your call is assigned to the appropriate group
and a Problem Management Record (PMR)
case record is opened.

You record your case number, etc.

IBM analyzes symptoms and makes a plan for
resolution.

Suspect hardware.

Suspect software.

IBM service technician
dispatched with parts.

Send to appropriate
support team.

Call is
closed.

Problem
fixed?

YES

NO

Progress
being
made?

YES

NO

Call **1-800-IBM SERV** back to request **escalation**
to the **lead customer support specialist** or the
National Duty Manager (with your case number
and a case history).

For WARRANTY INFORMATION, visit these sites:

IBM's Limited Warranty for Machines

Personal Computing (Net Vista, ThinkPad) http://www-1.ibm.com/servers/support/machine_warranties/sbp_personalcomputing.html

Servers (all eServers)
http://www-1.ibm.com/servers/support/machine_warranties/sbp_servers.html

Storage
http://www-1.ibm.com/servers/support/machine_warranties/sbp_storage.html

Printing Systems
http://www-1.ibm.com/servers/support/machine_warranties/sbp_printingsystems.html

For STORAGE hardware support on the following products, call the numbers below:

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/Loop Switches; 2032 McDATA Fibre Channel Director)

For PRINTING SYSTEMS support, call the number below:

IBM Printing Systems Service and Support: **1-800-358-6661**

- Service agreements and quality issues
- Supplies and maintenance
- Printer Selection Center for pre-sales assistance
- Technical support for IBM Infoprint Family of printers and printing solutions

Software Brand Support -- for DB2, Lotus, Rational, Tivoli, and WebSphere

What is IBM Software Support?

IBM's software support strategy combines subscription (upgrade protection) and remote technical support in a single, easy-to-buy feature called **Software Maintenance.**

Currently, several types of support offerings are available for the family of IBM Software Products. This pyramid outlines the progression of support available. Following is a quick explanation of each support offering and when you would use each type.

Self Help

All IBM customers are entitled to take advantage of the Self-Help services at http://ibm.com/software/support We offer a vast range of online service offerings designed to augment and enhance the value of your IT operation. With these online resources and tools, our self-help software support Internet site will meet many of your support needs. You will find here many capabilities such as basic search for closed APARs and software fixes, information on how to purchase software maintenance and premium support, marketing information, links to education and training information, and links to the IBM Software Support Handbook.


Support Offerings Overview

IPLA (OTC) Software:(distributed Non-Z series)
IBM (ITS) Premium
Lotus Premium
Data Management Regency (includes informix & DB2 in 2003)

Mainframe (MLC) & Operating Systems:
IBM (ITS) Premium

Premium Support

Passport Advantage
Software Maintenance

Enhanced Support

IBM Support Line

Report via fax, mail bulletin

Program/Warranty Services

Program Services
(defect via phone)

Self-Help

www.ibm.com/software/support

Self-Help

Note: Using only Self-Help is not recommended if you have a mission-critical deployment of IBM Software in your environment.

Program/Warranty Services

Continuing up the pyramid is Program/Warranty Services. Program Services, a support element baked into selected IBM products, allows you to report suspected defects to IBM via mail, fax or electronic means. You will receive a response back from IBM in the same media as you sent.

Enhanced Support

The next level on the pyramid is called Enhanced Support or Software Maintenance. Enhanced Support is available for an additional fee and provides a much more comprehensive support plan than does self-help. Enhanced Support is provided with the purchase of IBM Software for the first year. After the first year, if you want to continue the Enhanced Support, there is an associated fee and the Enhanced Support must be renewed on a yearly basis. This is designed to provide comprehensive, high quality remote technical support to your IS organization. Remote technical support allows you to obtain assistance from IBM for product-specific, task-oriented questions regarding the installation and operation of currently supported IBM software products. Please check the IBM Software Support Handbook for a list of remote technical support services.
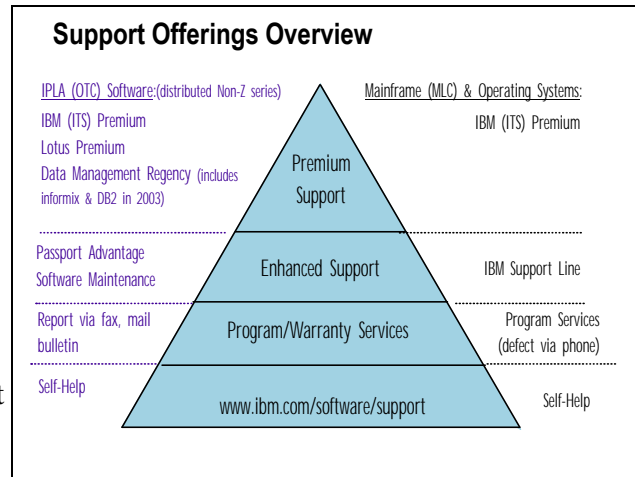
Premium Support

The final and top layer of the Software Support Pyramid is Premium Support. This offering is also provided as an additional fee service. These optional services can be customized to fit your individual needs. You can get direct access to IBM specialists who are able to handle all types of software support issues you may encounter.

Complete information about IBM's Support Family of Services can be found on the Internet at http://ibm.com/services

Support Lifecycle Process (End of Service)

At some point in a software product's lifecycle, support may end for the product as it was originally announced. A policy is in place to help you understand how the support lifecycle process works. The goal of this policy is to give customers a reasonable amount of time to purchase, install, and productively use a product, then migrate to a new version/release of that product. For those products that deliver a new version/release on an annual basis, this policy will allow customers to skip a version/release and migrate from release *n-2* to release *n*, where *n* is the most current version/release.

The highlights of this policy include:

1. A minimum three-year support period for all products (at the version/release level), starting at the general availability date of the product
2. A minimum twelve months notice to customers of a product (version/release level) being withdrawn from support
3. Establishing April and September as the only two months of the year for products to be withdrawn from support
4. Ensuring all components in a product are supported until the product is withdrawn from support
5. Ensuring support extensions will be available to the customer, with the objective of assisting the customer to complete the migration to a more current version/release of the product.

The End of Service dates for products can be found at http://www.ibm.com/Software/SupportLifecycle.

Note: It is not recommended to use out of service products in mission-critical deployments.

How to find details about IBM Software Support

If you need further information about the different software support options IBM offers, what the responsibilities are of the Site Technical Contact, phone numbers of support sites around the world, or any other support information, you can go to one source -- The IBM Software Support Handbook -- at http://ibm.com/software/support

(You can download the PDF file for printing.)

Accessing Software Support

Customer Software Support Self-Help
As we mentioned earlier, you can go to http://ibm.com/software/support to access online support.

Software Voice Support
If you are a current subscriber to Enhanced Support under the Passport Advantage Program, then you are eligible for phone support by calling **1-800-IBM-SERV (800-426-7378)** in the US and Canada.

(Phone numbers are different in each country and can be found in the online Support Handbook.)

Required information before calling:
- Customer number or Support ID (SID)
- Contact phone number
- Software platform
- Product and version information related to the problem
- Description of the issue
- Business impact or severity of the problem (severity level examples are given on the Quick Guide page)

Software Electronic Support
Through the electronic problem submission Web site at http://ibm.com/software/support you may post support questions electronically to the same support specialists who staff IBM's telephone support lines. Prior to submitting a problem via the Internet, you will need the same information as if you were placing a problem by telephone.

Electronic incident/PMR submission is available with the Passport Advantage and Passport Advantage Express Software Maintenance Offering through the IBM Software Support Web site.

You must be a registered user/authorized caller to use Electronic Software Support. To successfully register for electronic access, you must follow certain steps. To make this easier, we have developed several online tours for our Passport Advantage Software Maintenance customers that take you through step by step. For detailed information, see the Software Support Handbook.

These tours can be found at: http://ibm.com/software/support Click on "What's New" and select "Site Tours," "User Registration."

If you have difficulties registering...

1. Work with your Site Technical Contact to be authorized for this service capability. Each customer has an assigned Site Technical Contact.

2. Send an e-mail to esrhelpdesk@Lotus.com

Other Tours
Other tours that will be useful for the new Support Site user are the "Problem Submission Tutorial," the "Software Support Overview," which takes you through the Support Web site, and the "My Software Support" tour, which teaches you to personalize your support experience. These tours are found at http://ibm.com/software/support

Escalating your Problem

If, at any point in the service process, your expectations are not being met by IBM, Lotus, Tivoli, Informix, or Rational Support, you can call attention to this problem by asking for a Duty Manager. The Duty Manager can be reached at **1-800-IBM-SERV or 1-800-426-7378 (in the US and Canada)**.

Downloading Product Upgrades

As part of the Passport Advantage Program, you are entitled to download product upgrades, download entitled software, purchase new IBM products online or renew Software Maintenance. All of these things can be accomplished by going to http://ibm.com/software/passportadvantage

Need to make an Administrative Change to your Passport Advantage Agreement?

There may be times when you need to contact someone at IBM to make some system changes to your Passport Advantage account. For example, you may need one of the following:

- Change your Site Technical Contact
- Lost your Customer number
- Not sure who to call for Technical Support
- Need your company address changed

If any of these are the case, you can send an e-mail to Support_Administration@Lotus.com

Inventory OnLine

http://www.ibm.com/support/operations/inventory

The **IBM Inventory OnLine** service lets you access your company's IBM inventory information via the Internet. You can:
- View inventory information quickly
- Eliminate the need to request this data from your IBM sales or support contact
- Reduce the need to handle paper reports

Free! There are no IBM charges associated with Inventory OnLine. No special software is required. The only requirement is an Internet browser and connection.

Register for access. To assure the privacy of your IBM inventory data, each Inventory OnLine user must register with IBM to receive a userid and password. A specific list of IBM customer numbers will be associated with each user. This ensures that each user sees only the inventory data for which authorization has been received. New users are authenticated; that is, before giving anyone access to the inventory for a particular company or organization, IBM will verify that the new user is indeed employed by that company or organization.

Registration Instructions:
1. Access the Inventory OnLine URL:
   https://www.ibm.com/support/operations/inventory
2. If you have previously registered with IBM Registration, type in your userid and password and click "Sign In." On the next panel, click on the link to "Update Profile." You will be asked to re-enter your userid and password. Skip to Step 4.
3. If you have NOT previously registered with IBM Registration, please click on the "Register" button. Complete the registration form that is provided.
4. Review the information in the form for accuracy, make any necessary updates, then click on "Continue".
5. Review the acknowledgement, then click on "Continue".
6. Indicate how you would like to be authorized for Inventory OnLine access -- by customer number(s) or enterprise number. Indicate your account type -- IBM Business Partner, Federal, Commercial or State & Local Government, then click on "Submit".
7. The next screen is the confirmation. You will receive an e-mail from IBM within two business days informing you that your registration has been processed.

Designate a customer number or machine type search. The first screen allows you to search for:
- data by customer number
- customer number by location
- enterprise-wide data
- a specific type-serial.

Select inventory search criteria. This screen lists the search options available to you -- product description, machine type, serial number, hardware, software, total inventory, warranty expirations.

IBM Products. IBM servers and peripherals, associated software, and selected PC hardware products are available for viewing, including IBM products purchased from an IBM Business Partner.

View the inventory detail. You will see the same inventory information reflected in IBM's inventory databases.

Print. If your browser has a print function, you can print any screen. Or use the enhanced printing option to designate specific pages to print in a report format.

Download. When an inventory inquiry results in multiple line items of data, you can request the data be downloaded to a spreadsheet on your workstation, providing easier manipulation of data for inventory reconciliation.

Update Request. This form lets you submit inventory changes electronically. When you submit the completed form, it will be sent to the IBM Customer Support Operations team for processing.

Navigate! It is easy to click the appropriate area on the navibation bar to review customer numbers or to select a different search option, etc.

Get help. From any screen, click "Help."

Communicate with us. Use the Feedback function to communicate with us electronically with tool questions or comments.

Questions? Dial 1-877-504-8930

TotalStorageâ Hardware and Software Support

IBM TotalStorage Expert

http://www.storage.ibm.com/software/expert/index.html

Get the maximum potential from your IBM Disk and Tape Subsystems by using the information provided by the IBM TotalStorage™ Expert.

 * **TotalStorage™ ESS Expert -** helps storage administrators monitor and track the performance of their Enterprise Storage Server.

 * **TotalStorage™ ETL Expert -**provides storage administrators with important, easy to access information about their Magstar 3494 Tape Servers.

With TotalStorage Expert, you're able to keep track of the total capacity, assigned capacity and free capacity of the disk storage on all the Enterprise Storage Servers anywhere in the enterprise. You can get a real-time status on key measurements concerning the Tape Library and Virtual Tape Server.

ESS and ETL components of Expert are packaged together, run on the same server, share a common database, and offer seamless integration with a common look and feel. The two features can be separately licensed to accommodate users who may only be interested in one component.

Other application benefits include: LUN to host disk mapping, customization and enablement capability for threshold events, and Simple Network Management Protocol (SNMP) alerts for ESS Expert exception events that exceed threshold values.

(NOTE: Usage and installation questions for Expert products require a **Support Line** contract.)

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 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://www.storage.ibm.com/snetwork/nas/index.html 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: http://www-1.ibm.com/services/its/us/installation.html

For hardware support on the following products, call the numbers below:

> **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/Loop Switches; 2032 McDATA Fibre Channel

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/

The Works ... the full range of Support and Services from IBM Global Services (IGS)

We recognize that you need support that goes beyond resolving hardware problems. To succeed, your e-business needs support that offers solution optimization, maximum availability, proactive care, and access to experts. IBM service and support does all that -- including quick response throughout your systems' life cycle. Visit http://www.ibm.com/services/fullservice.html

For IBM eServers and Storage -- the Technical Support Advantage helps you keep your business up and running for years

For more than 25 years IBM has been a leader and innovator in electronic technical support and in designing products for serviceability. The Technical Support Advantage is a comprehensive set of resources (tools and technologies in four key areas) all focused on helping you learn about, choose, implement, and use the right IBM @server solution for your IT infrastructure needs. Visit http://www-1.ibm.com/servers/eserver/techsupport.html   Each key area gives you powerful reasons for buying and using IBM @server systems:

- **Configuring tools and technologies** -- for creating, installing, and managing your infrastructure day to day
- **Optimizing tools and technologies** -- to help maximize resource utilization and high availability
- **Healing tools and technologies** -- for seeking help, locating and applying problem fixes and diagnosing unusual situations or problems
- **Protecting tools and technologies** -- to help avoid intrusions and provide security to an infrastructure

The Technical Support Advantage helps you gain competitive advantage and allows for extendibility as you grow, whether you have a small or large IT shop. It helps provide for things like supportability, serviceability, reliability, availability, trust -- peace of mind.

Use this site -- http://www-1.ibm.com/servers/eserver/techsupport.html -- as your starting point. You'll find tools and resources that streamline the technical planning and support for your servers -- from planning to education, installation, maintenance, and everything in between.

Choose your platform and find out details!
Select your platform -- iSeries™, pSeries™, xSeries™, and/or zSeries™ -- from the pull-down menu at

http://techsupport.services.ibm.com/server/support

IBM Learning Services --

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

or **1-800-IBM-TEACH**

- World's largest IT training provider delivering thousands of courses in 55 countries

IBM Software Services

http://www-1.ibm.com/services/its/us/servicesbyproduct.html

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

You've made a big investment in IT technologies, and your software is the fuel that drives your hardware engines. To protect that investment and meet your business goals, you need reliable, high-quality software support.

IBM gives you access to a wide array of services for hardware and software products that address a variety of IT issues. Our services are designed to be flexible, making it easy for you to choose the support you need. And, if our standard offerings don't address your specific needs, we can customize a solution that will.

Operational Support Services for Software

In addition to SupportLine (see "Hardware, Software, and "Don't Know" section of the Customer Support Plan for more information), IBM Global Services also offers the following software services:

* Account Advocate

* Advanced Support

* Consult Line

* Direct Support

* End-user Support

* On-site Technical Advocate

* On-site Technical Assistant

Visit http://www-1.ibm.com/services/its/us/swsupport.html#operational for details.

SupportLine enhancements:

* SupportLine 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 SupportLine procurement options and elimination of product groups.

A summary of IBM Services available to you . . .

If you would like details on any of the services below, reference the services list at
http://www.ibm.com/services/fullservice.html

Business Consulting Services	◆ Application Management for Enterprise Applications ◆ Business Intelligence ◆ Buy and Supply Solutions ◆ Customer Relationship Management/CRM ◆ Dynamic Workplaces ◆ e-business Integration Solutions ◆ Enterprise Application Services/ERP	◆ Portals, Knowledge, and Content ◆ Procurement Services Management ◆ Product Lifecycle Management ◆ Security and Privacy ◆ Strategy and Change Consulting ◆ Supply Chain Management ◆ Wireless e-business Solutions	
Infrastructure Services	◆ Application Management ◆ IBM Business Consulting ◆ e-business Hosting ◆ Integrated Technology ◆ Networking	◆ Security and Privacy ◆ Storage ◆ Strategic Outsourcing ◆ Wireless	
On Demand Services	◆ Business Process On Demand	◆ Infrastructure On Demand	
Integrated Technology Services	◆ Infrastructure and Systems Management ◆ Business Continuity and Recovery	◆ Technical Support ◆ Maintenance	

Product-Specific Services	**eServer Services for zSeries, pSeries, iSeries, and xSeries Servers**
	◆ Business Intelligence
	◆ E-mail and Collaboration
	◆ Customer Relationship Management (CRM)
	◆ e-business
	◆ Enterprise Application Solutions / Supply Chain Management (EAS/SCM)
	◆ Life Sciences
	◆ Product LIfe Cycle Management (PLM)
	◆ Scientific and Technical
	◆ Server Consolidation
		Storage Services
		◆ Assessment
		◆ Planning and Design
		◆ Migration and Implementaion
		◆ Managed Operations and Support
		◆ Security
		◆ Testing
		◆ Performance Management
		◆ Connectivity
		◆ Networking/Network Integration
		◆ Tivoli
		◆ Infrastructure
			Software Services
			◆ Enhanced Software Services
			  ◆ Support Line
			  ◆ SmoothStart
			  ◆ Database and Data Management
			  ◆ e-commerce
			  ◆ Networking and Communications
			  ◆ Operating Systems
			  ◆ Systems Management
			  ◆ Web Application Servers
			  ◆ Passport Advantage

Strategic Outsourcing Services	◆ Application Management ◆ Desktop Outsourcing ◆ e-business Hosting	◆ Network Outsourcing ◆ Data Center Outsourcing	
IBM Training Solutions	◆ World's largest IT training provider	◆ IT Certifications ◆ Mindspan Services (LearningSpace Virtual Classroom)	
IBM Global Financing	◆ TOTAL Solution ◆ Commercial ◆ Business Partners	◆ IT Products and Services ◆ Financing Tools	

CSO* Overview for the US

*Customer Support Operations

http://www-3.ibm.com/support/operations/us/index.shtml

Did you ever:

✓ **Want to view an invoice or ask a question about it -- on the Internet?**
Our "Invoices On-Line" eTool is free and easy to use.

- ◆ Register for Invoices On-Line at **http://iol.dbexpress.net/am/us/en**
- ◆ For registration assistance, call **1-877-504-8930** or e-mail **invoices@us.ibm.com**

✓ **Want to see your inventory or ask a question about a machine's maintenance status -- on the Internet?**

- ◆ Register for Inventory On-Line at **https://www.ibm.com/support/operations/inventory/**
- ◆ For registration assistance, call **1-877-504-8930.**

✓ **Want to check the status of an order?**

- ◆ By year-end 2003 , you will be able to access "Integrated Order Status" to search, view, and download information about your IBM products on order.

✓ **Have an interest in taking advantage of any of IBM's other electronic invoice delivery or payment options?**
Ask your Sales Rep, Customer Relationship Rep, or Sales Relationship Rep about any of these topics:

- ◆ Electronic Data Interchange (EDI), for the electronic delivery and payment of invoices
- ◆ Invoice consolidation, to combine multiple accounts on one invoice
- ◆ Direct Debit, to save .25% by allowing auto-withdrawal of IGF invoices from your bank account
- ◆ Procurement "P-"cards (credit card) payment options for miscellaneous small purchases for which the PO process is too cumbersome.

CSO provides the following types of non-technical support:

- ◆ Order entry and order management for hardware, software, and publications
- ◆ Scheduling and delivery coordination
- ◆ Contract management for IBM maintenance, services, purchases, and software licensing
- ◆ Inventory record keeping
- ◆ Billing and invoicing reconciliation and customization
- ◆ Collection and reconciliation of accounts receivable

CSOL -- Customer Support On Line -- can help you understand and clarify many non-technical queries you may have involving:

- ◆ Invoices and payments -- including billing options, payment methods, and terms, plus dispute resolution
- ◆ Tracking of hardware and software type/model/serial numbers
- ◆ Administrative support for maintenance and service contracts, including billing
- ◆ Order information status
- ◆ SW order management, contract management, inventory management, billing, disputes, and expiration/renewal management
http://www.ibm.com/support/operations/us/index.shtml

Make Contact! You may also contact CSO via the phone numbers below:

Commercial & State & Local Government Customers **1-877-426-6006**

US Federal Government Customers **1-800-333-6705**

IBM Business Partners **1-800-426-9990**

We welcome your questions, comments, and feedback.

If you are calling, depending on the type of inquiry, please have the following available:

- ◆ Customer number
- ◆ Order confirmation number
- ◆ Contract number
- ◆ Invoice number

IBM Support URLs

General Support

Corporate Home Page . . . . http://www.ibm.com/

Global Financing http://www-1.ibm.com/financing/

Products and Services/Shop IBM . . . . http://www.ibm.com/products/us/

Redbooks . . . . http://www.redbooks.ibm.com/

Technical Support Directory (Global) . . . . http://www.ibm.com/planetwide/

Technical Support Directory (US) . . . . http://www.ibm.com/planetwide/us/

Technical Support and Downloads Home . . . . http://www.ibm.com/support/us/

Customer Support Operations (Administrative Support) - Orders, Inventory, Accounting...more

Customer Support Operations Home Page . . . . http://www.ibm.com/support/operations/worldwide/

Direct Debit Option, Electronic Data Interchange (EDI), Credit Card and other Electronic Payment Methods: . . .
. . . . US: http://www-3.ibm.com/support/operations/us/invoices_payments/read_more.shtml
. . . . Canada: http://www-306.ibm.com/support/operations/ca/invoices_payments/bank_account.shtml
. . . . . . Can. French: http://www-306.ibm.com/support/operations/ca/fr/invoices_payments/bank_account.shtml

Inventory On-Line . . . . https://www.ibm.com/support/operations/inventory/

Invoices On-Line . . . . http://iol.dbexpress.net/am/us/en

. . . . Canada: http://iol.dbexpress.net/am/ca/en

. . . . Can. French: http://iol.dbexpress.net/am/ca/fr

ServicePac Options for Warranty & Maintenance http://www-1.ibm.com/services/its/us/spwarmain.html

iSeries -- Midrange Servers

iSeries (AS/400) Home and Hardware . . . . http://www.ibm.com/eserver/Iseries/

iSeries (AS/400) Software . . . . http://www.ibm.com/servers/eserver/iseries/software/

iSeries (AS/400) Solutions http://www-1.ibm.com/servers/solutions/iseries/index.html

iSeries Support Home . . . . http://techsupport.services.ibm.com/server/support?view=iSeries

iSeries Extreme Support Tools http://www-912.ibm.com/supporthome.nsf/document/23393024

iSeries Technical Support Overview http://www-912.ibm.com/supporthome.nsf/document/20965550

iSeries Nation . . . . http://www.ibm.com/servers/eserver/audience/Homepage.wss?view=ination

Printing Systems

Printing Systems Division Home . . . . http://www.printers.ibm.com

Printing Systems Support Home . . . . http://www.printers.ibm.com/R5PSC.NSF/Web/support+overview

Printing Systems Service Direct™, automated dispatch . . . . . . http://www.printers.ibm.com/pbin-oasis/rgw/IBM.RBK

pSeries -- UNIX Servers

pSeries (RS/6000/UNIX servers) Home . . . . http://www.ibm.com/servers/eserver/pseries/

pSeries Support Home . . . . http://techsupport.services.ibm.com/server/support?view=pSeries

Services (IBM Global Services - IGS)

IBM Global Services Home . . . . http://www.ibm.com/services/

Business Continuity and Recovery Services http://www.ibm.com/services/continuity/recover1.nsf

IBM Business Consulting Services http://www-1.ibm.com/services/bcs/index.html/

ITS (Integrated Technology Services) Services Catalog . . . . . . http://www.ibm.com/services/its/us/portfolio.html

IBM Customer Support Plan -- Administrative Support / Helpful URLs / Phone Numbers

Software

Software Support Home Page . . . . http://ibm.com/software/support

  · *- Search for product names, error code, APAR number or phrase; Submit and track problems; Access Trials and betas; Link to product support pages and the Software Suppoft Handbook*

Passport Advantage http://www-3.ibm.com/software/support/pa.html

DB2 Information Management Support http://www-3.ibm.com/software/data/support/l

Lotus Support Services http://www-3.ibm.com/software/lotus/support/

Rational Software Support http://www-3.ibm.com/software/rational/support/

Tivoli and Systems Management Support http://www-3.ibm.com/software/sysmgmt/products/support/

Websphere Software Platform Support . http://www.ibm.com/software/info1/websphere/index.jsp?tab=support/index

TotalStorage

Disk Systems Home Page . . . . http://www.storage.ibm.com/hardsoft/disk/index.html

DFSMS Family of Products . . . . http://www.storage.ibm.com/software/sms/index.html

FAStT Home Page . . . . http://www.storage.ibm.com/hardsoft/disk/fastt

Global Services for Storage http://www-1.ibm.com/services/its/us/san2.html

Tape and Optical Storage Home Page . . . . http://www.storage.ibm.com/hardsoft/tape/index.html

Storage Networking . . . . http://www.storage.ibm.com/snetwork/index.html

    Network Attached Storage (NAS) . . . . http://www.storage.ibm.com/snetwork/nas/index.html

    Storage Area Networks (SANs) . . . . http://www.storage.ibm.com/ibmsan/index.html

Storage Software Home Page . . . . http://www.storage.ibm.com/software/index.html

TotalStorage Technical Support http://www-1.ibm.com/servers/storage/support/index.html

TotalStoage Virtualization . . . . http://www.storage.ibm.com/software/virtualization/index.html

TotalStorage Expert . . . . http://www.storage.ibm.com/software/expert/

Tivoli Storage Management Solutions . . . . http://www.tivoli.com/products/solutions/storage/news.html

TotalStorage Home Page . . . . http://www.storage.ibm.com/

xSeries

IBM ServerGuide Updates (IBM Direct Services) . . . . http://www.pc.ibm.com/coupon/

IBM ServerProven™ (Compatibility) . . . . http://www.pc.ibm.com/us/compat/

IBM Director . . . . http://www-1.ibm.com/servers/eserver/xseries/systems_management/director_4.html

Networking Tech Support   http://www.networking.ibm.com/support/products.nsf/support/home?OpenDocument

Replacement Part Numbers (FRUs or "Field Replacement Units") for Installed Options . . . .
  . . http://www.pc.ibm.com/qtechinfo/MIGR-48RPEJ.html?lang=en_US&page=brand&brand=IBM+PC+Server%

Systems Management . http://www-1.ibm.com/servers/eserver/xseries/systems_management/xseries_sm.html

xSeries Technical Library . . . . http://www.pc.ibm.com/us/eserver/xseries/library/index.html

xSeries Education . . . . http://www.ibm.com/servers/eserver/education/xseries/index.html

xSeries/Netfinity Home Page . . . . http://www.pc.ibm.com/us/eserver/xseries/

zSeries

zSeries (S/390) Home . . . . http://www.ibm.com/servers/eserver/zseries/

Resource Link   https://app-06.www.ibm.com/servers/resourcelink/hom03010.nsf/pages/resourceLink?OpenDocument

zSeries Software . . . . http://www.ibm.com/servers/eserver/zseries/software/

zSeries Operating Systems . . . . http://www.ibm.com/servers/eserver/zseries/os/

zSeries Networking . . . . http://www.ibm.com/servers/eserver/zseries/networking/

zSeries I/O Connectivity . . . . http://www.ibm.com/servers/eserver/zseries/connectivity/

IBM Phone Numbers

Customer Service Center 1-800-IBM-4YOU (426-4968)
- *A single point of contact if you do not know who to call at IBM*
- *Assists with information on IBM products and services, seminars and classes, marketing assistance, and more*

Customer Support Operations Numbers

US Commercial plus State and Local Government Customers **1-877-426-6006**

US Federal Government Customers **1-800-333-6705**

US Business Partners **1-800-426-9990**

Customer Support On-Line Team (for help with On-Line tools) **1-877-504-8930**

Canada . . . . **1-866-880-CSOL (880-2765)**

Global Services' Integrated Technology Services (ITS) Sales . . US: 1-888-426-4343
. . . . Canada: 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/availability, improve productivity, reduce costs, and increase your IT investments value*

Hardware Technical Support Center 1-800-IBM-SERV (426-7378)
- *Serves as the primary contact for hardware problem reporting*
- *Accepts repair calls for hardware covered by an IBM Maintenance Agreement or Support Contract*
- *Notifies local IBM management if customer requests to contact them*

IBM Call (e-mail is "Call R TM@us.ibm.com") 1-800-426-2255 (800-IBM-CALL)
- *Customers or IBMers can call this line to obtain a SL and SW Subscription quote*

IBM Inside Sales 1-888-426-4343
- *Customers or IBMers can call this line to obtain information on an Internet ad or get a Maintenance price quote.*

Learning Services . . . . 1-800 IBM-TEACH (426-8322)
- *To receive information and/or enroll, call between 7 AM - 7 PM CST Monday - Friday.*

Parts Order Center (Boulder) 1-800-388-7080
- *To place a parts order for PCs, typewriters, and some printers, call between 8 AM - 7 PM, EST Monday - Friday.*
- *NOTE: Please be prepared to provide the IBM part number.*

Passport Advantage Customer Care 1-800-978-2246

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e-business

IBM Global Services supports e-business on demand

Visit this page to learn more . . .

http://www-1.ibm.com/services/ondemand/index.html

Printing Systems Service & Support . . . . (US) 1-800-358-6661
· *Service Agreements and Quality Issues*
· *Supplies and Maintenance*
· *Printer Selection Center for pre-sales assistance*
· *Technical Support for IBM Infoprint 1220, 1228, 1120, 1125, 1130, 1140, 1145, 12, 20, 21, 32 and 40, plus Network Printers 12 and 17*

Publication Orders (including Redbooks) and SLSS (System Library Subscription Services) Support
. . . . US: 1-800-879-2755
. . . . Canada: 1-800-IBM-4YOU
· *To order publications or to receive System Library Subscription Service (SLSS)*

Software Maintenance Agreement (SWMA) Project Office 1-800-773-8091
 This is the line customers can call for assistance
  · *(SLTRANS@us.ibm.com) in migrating from current SupportLine/SW Subscription to new Software Maintenance Contracts)*

Software Technical Support Center (SupportLine; fee-based) . . . . US and Canada: 1-800-IBM-SERV
 Now serves as the primary contact for software problem reporting

· *Accepts calls for software tech support covered by IBM Licensing Agreement and Support Contract*
· *Notifies local IBM assistance if customer requests to contact them*
· *Remote customer technical support offering for all IBM operating systems & select non-IBM operating systems (Windows, for example).*
· *This support offering is available for software that is not available through the newly announced Software Maintenance offering.*

xSeries HelpCenter . . . . US and Canada: 1-800-IBM-SERV (426-7378)
· *Serves as primary contact for IBM xSeries/Netfinity Server hardware; top four network operation systems (IBM OS/2 Warp Server, Novell NetWare, Microsoft NT, and SCO UNIX); popular network interface cards/adapters; network clients*
· *Problem determination, problem source identification*
· *Hardware warranty dispatch*