IBMCUSTOMER 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:







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



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.

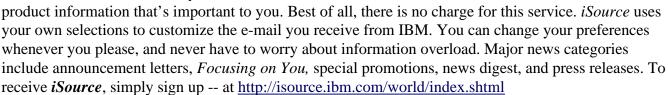


You will find important support and reference information such as:

- 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



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.

Begin your IBM 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 C All publications Only orderable publications Only online publications (read/download)

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

pSeries e-Support

NEW! IBM @server pSeries Information Center

http://publib16.boulder.ibm.com/pseries/en US/infocenter/base/index.htm

Information Center highlights includes:

- What's new in AIX and pSeries, with topics such as:
 - w Cluster Systems Management
 - w Dynamic Logical Partitioning (DLPAR)
 - w Security
 - w Capacity Upgrade on Demand
- Message database you can search for information about AIX error messages, LEDs, and error identifiers.
- How-to's for administrators and users
- Troubleshooting
- FAQs
- AIX documentation
- Hardware documentation



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

If you don't find what 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. 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.

BEFORE YOU CALL...

To help technicians more quickly determine and resolve your problem, please have your machine's:

- * Model number
- * BIOS revisions
- * Type

- * Other pertinent info
- * Serial number

PLEASE:

Record your case number Verify your case number with the staff

Support staff can dispatch a hardware Customer Service Representative if necessary.

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

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.

IBM Customer Support Plan -- Support for Hardware, "Don't Know," and OSs

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

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 Hardware and Software Support number listed above or call our general information number-- **1-800-IBM-4YOU.** Call between 7am - 10pm EST.

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

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

pSeries Operating System Software Support

IBM Software Maintenance for AIX Operating Systems

IBM's world-class Software Support is now available under the Enhanced AIX® Subscription and



pSeries[™] Software Maintenance (SWMA) Solution. This new Solution for the AIX[®] Operating System takes IBM's software subscription for upgrade entitlement and IBM's world-class technical support organization, and combines them into a single offering for IBM @server[™] pSeries[™] systems running AIX[®].

The SWMA offering provides **prime shift coverage during normal country business hours with off-shift coverage for emergency (severity 1) problems**. An open authorized caller list will provide access on demand to IBM product specialists. **Automatic notification and online updates on demand** will provide the latest versions and releases to your eligible software.

SWMA also lets you take advantage of both telephone and electronic access to IBM's service specialists, who can address a wide variety of questions and concerns, including:

- Usage and installation
- Product compatibility and inter-operability
- Interpretation of product documentation
- Diagnostic information review to help isolate the cause of a problem
- Configuration samples
- IBM and multi-vendor database searches
- Assistance with problem source identification and problem resolution.

SWMA is included as of January 28, 2003 with new pSeries systems configured with AIX . All current subscription and support contracts will be honored. Your IBM representative can provide information about your options for migrating to SWMA.

Enhanced AIX® Subscription and pSeries Software Maintenance (SWMA):

http://www-1.ibm.com/servers/aix/products/softwaresub/maint.html

NOTE 1: Support for AIX will be withdrawn from the Support Line offering, effective July 31, 2003. Software Maintenance (SWMA) provides entitlement to software technical support.

NOTE 2: For pSeries customers in the US, a Support Line project office is available to assist in determination of contract types, renewal dates, general offering information, etc.. Contracts will NOT be transitioned automatically as has been done previously. The project office can be contacted at:

Customers = 800-773-8091 (option 2) between 8-5 Central, Monday-Friday

Internals = SLTRANS@US.IBM.CCM

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 -- iSeriesTM, pSeriesTM, xSeriesTM, and/or zSeriesTM -- 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 PrivacyStorageStrategic OutsourcingWireless | |
| On Demand Services | ◆ Business Process On Dema | nd | ◆ Infrastructure On Demand | |
| Integrated Technology Services | Infrastructure and Systems I Business Continuity and Red | | Technical SupportMaintenance | |
| 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 Llfe Cycle Management (PLM) Scientific and Technical Server Consolidation | Storage Servi Assessment Planning and Migration and Implementation Managed Op Support Security Testing Performance Connectivity Networking/N Integration Tivoli Infrastructure | Enhanced Software Services Support Line SmoothStart Database and Data Management e-commerce Network Management Operating Systems Systems Management Web Application Servers | |
| Strategic Outsourcing Services | ◆ Application Management◆ Desktop Outsourcing◆ e-business Hosting | Network OutData Center | • | |
| IBM Training Solutions | World's largest IT training provider | IT CertificationMindspan Se | ons ervices (LearningSpace Virtual Classroom) | |
| IBM Global Financing | TOTAL Solution Commercial Business Partners | • IT Products a • Financing To | | |

Customer Support Operations (CSO) Overview for the US



Customers who purchase through a Business Partner must contact their Business Partner for administrative services.

- ✓ Are you a commercial customer (i.e., not an individual consumer), a state, local, or US federal customer? an IBM Business Partner?
- ✓ Do you ever have questions about an invoice from IBM or want to check on the status of an order?
- ✓ Do you have other administrative questions about your account and inventory?

Customer Support Operations (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

Customer Support Online (CSOL) 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

Make Contact!

For information or to initiate service requests, please visit our Web site at http://www-3.ibm.com/support/operations/worldwide/

You may also contact CSO by phone (see list below):

If you are calling, depending on the type of inquiry, please have the following relevant information available, which may include your:

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

IBM Support URLs

Helpful IBM URLs are organized by category:

- ◆ General
- ◆ Customer Support Operations
- ◆ iSeries
- ◆ Printing Systems
- pSeries

- ◆ Services (IBM Global Services)
- ◆ Total Storage
- xSeries
- ◆ zSeries

| General Support | |
|---|--------------|
| Corporate Home Page | om/ |
| Server Central | ıtral/ |
| Global Financing | ing/ |
| .inux | nux/ |
| Products and Services/Shop IBMproducts | <u>s/us/</u> |
| Redbooks | <u>:om/</u> |
| Software Home | are/ |
| echnical Support Directory (Global) | <u>/ide/</u> |
| echnical Support Directory (US) | <u>/us/</u> |
| echnical Support and Downloads Home | <u>t/us/</u> |
| Customer Support Operations (Administrative Support) - Orders, Inventory, Accountingmor | e |
| Customer Support Operations Home Page | <u>/ide/</u> |
| Series Midrange Servers | |
| Series (AS/400) Home and Hardware | ries/ |
| Series (AS/400) Software | are/ |
| Series (AS/400) Solutions | <u>html</u> |
| Series Support Home | |
| Series Extreme Support Tools http://www-912.ibm.com/supporthome.nsf/document/23393 | |
| Series Technical Support Overview http://www-912.ibm.com/supporthome.nsf/document/20965 | |
| Series Nation | |

| Services (IBM Global Services - IGS) |
|---|
| IBM Globas Services Home |
| Business Continuity and Recovery Services http://www.ibm.com/services/continuity/recover1.nsf |
| IBM Business Consulting Services |
| ITS (Integrated Technology Services) Services Catalog http://www.ibm.com/services/its/us/portfolio.html |
| TotalStorage |
| Disk Systems Home Page |
| DFSMS Family of Products http://www.storage.ibm.com/software/sms/index.html |
| FAStT Home Page |
| Tape and Optical Storage Home Page |
| Storage Networking |
| iSCI (SCSI over IP) |
| Network Attached Storage (NAS) |
| Storage Area Networks (SANs) |
| SAN Software |
| Storage Software Home Page |
| TotalStorage Technical Support http://ssddom02.storage.ibm.com/techsup/webnav.nsf/support/home |
| TotalStorage Expert |
| Tivoli Storage Management Solutions http://www.tivoli.com/products/solutions/storage/news.html |
| TotalStorage Home Page |
| xSeries |
| IBM & Microsoft Windows NT Home Page http://www.pc.ibm.com/software/windowsNT/ |
| IBM ServerGuide Updates (IBM Direct Services) |
| IBM ServerProven™ (Compatibility) |
| IBM Director http://www-1.ibm.com/servers/eserver/xseries/systems_management/xseries_sm.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 |
| Systems Management . http://www-1.ibm.com/servers/eserver/xseries/systems_management/xseries_sm.html |
| xSeries Technical Library |
| xSeries Cluster Education |
| xSeries/Netfinity Home Page |
| 10011001110111111111111111111111111111 |
| zSeries |
| zSeries (S/390) Home |
| https://app-06.www.ibm.com/servers/resourcelink/hom03010.nsf/pages/resourceLink?OpenDocument |
| zSeries Software |
| zSeries Operating Systems |
| zSeries Networking http://www.ibm.com/servers/eserver/zseries/networking/ |
| zSeries I/O Connectivity |

IBM Phone Numbers



| Customer Service Center | 300-IBM-4YOU | (426-4968) |
|--------------------------------|------------------|------------|
| Custoffier Service Certici | | (720-7300 |

- · 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 Customers |
|---------------------------------------|
| US State & Local Government Customers |
| US Federal Government Customers |
| US Business Partners |
| 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

Why IBM Service?

IBM is uniquely qualified to deliver a caliber of service and support that allows businesses to concentrate on doing business. Why? Because:

- 116,000 people worldwide deliver IBM support and service in 164 countries.
- 2,500 IBM support specialists handle thousands of customer and IBM Business Partner calls each month, in 23 languages from nine HelpCenters around the world.
- Maintenance parts are available from 145 parts-stocking locations (US); 479 locations (worldwide).

You can find more detailed information at http://www.ibm.com/services/its/us/

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

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.

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

| Parts Order Center (Boulder) |
|--|
| Printing Systems Service & Support |
| • 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 |
| •To order publications or to receive System Library Subscription Service (SLSS) |
| xSeries HelpCenter |
| xSeries HelpCenter's Enhanced Service and Support Center (All Issues) US: 1-800-IBM-PROD (426-7763) |
| ·Serves as the primary contact for all entitled problem reporting ·Priority access requires ID and PIN |
| •Diagnoses hardware/software issues •Notifies IBM Global Services Delivery Center of hardware fix (when necessary) and passes customer over to IBM-SERV for a customer service representative / parts dispatch |

© International Business Machines Corporation 2002

IBM , the IBM logo, e-business, the e-business logo, AS/400, AIX, AS/4003, OS/400, 400, Redbooks, RS/6000, SmoothStart, SP, DFS, DFSMhsm, Enterprise Asset Manager, Enterprise Storage Manager, Magstar, SecureWay, StorageSmart, StorWatch, ClusterProven, HelpCenter, ServerGuide, ServerProven, ServicePac, SystemXtra, Netfinity, OS/2, RS/6000, S/390, and xSeries are trademarks of IBM Corporation in the United States and/or other countries. Microsoft, Windows, and Windows are trademark of Microsoft Corporation in the United States, other countries, or both. Linux is a registered trademark of Linux Torvalds. UNIX is a trademark of the Open Group. Lotus and Tivoli are subsidiaries of IBM Corp. and require attribution. Other company, products, and services names may be trademarks or service marks of other companies. IBM reserves the right to changes specifications or other product information without notice. This publication may include typographic errors and technical inaccuracies. The content is provided as it, without express or implied warranties of any kind, including the implied warranties of merchantability or fitness for a particular purpose. Some jurisdictions do not allow disclaimers of implied warranty so this disclaimer might not apply to you. NOTE: Although this document's information is currently accurate, be aware that contracts, terms, and conditions, support procedures, and assigned personnel can change at any time. This document does not modify or replace any contract in place between you and IBM and is subject to change based on the terms and conditions of the contracts in place between you and IBM.