IBM SmartCloud Monitoring provides holistic, end-to-end performance, capacity planning, and availability management required to effectively manage virtual and cloud environments

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At a glance

IBM® SmartCloud Monitoring V7.1 essential functions:

- Performance, capacity, and availability management for virtualized environments
- Virtual machine operating system monitoring
- Sophisticated capacity planning
- Policy-driven workload placement guidance
- Easy-to-navigate dashboards to visualize performance and availability of server, storage, network resources

Overview

IBM SmartCloud Monitoring V7.1 delivers sophisticated end-to-end performance, availability, and capacity management capabilities to help you optimize your virtualized cloud and hybrid environments. Maximizing the total cost of ownership benefits of these infrastructures requires the ability to consolidate and place workloads onto fewer servers, or deliver increasing agility and flexibility to lines-of-business by identifying available capacity for new projects. Optimal performance and availability of workloads requires a careful balance of resource allocations across CPU, network, memory, and storage. With this offering, you can more intelligently assess and optimize workload placement, taking into account constraints of the infrastructure and business policies, instead of relying solely on resource availability in the cloud or virtual host infrastructure. With prebuilt Web 2.0 dashboards, IBM SmartCloud Monitoring allows you to visualize, rapidly assess performance and availability, and balance resources across server, storage, and network components in your physical and virtual environment.

Even the smallest virtualized or cloud infrastructure requires levels of automation and workload density that demands sophisticated capacity planning. Gone are the days when operators simply place new virtual machines onto the "least busy" hosts and trust that there is plenty of overlap in pooled resources to prevent contention. Today, through the use of powerful capacity analytics and "what-if" placement modeling tools in IBM SmartCloud Monitoring, architects and administrators can now make better decisions on where to place workloads and how to model expansion scenarios.
Assuring the performance and availability of the virtualized cloud infrastructure is only half of the cloud management story. Over-provisioning and under-provisioning of allocated virtual resources (server, network, and storage) are key mistakes that erode cost savings or cause service performance problems. By monitoring virtual machines at the operating system level, performance data of the cloud infrastructure and the individual cloud workloads can be correlated to help improve configurations and placement.

IBM SmartCloud Monitoring benefits:

- Reduce outages and slowdowns by proactively identifying and communicating resource bottlenecks through alerts, dashboards, and reports
- Intelligently plan and configure your virtual and cloud environments, reducing hardware costs, using policy-driven capacity analytics and "what-if" workload optimization tools
- View and rapidly assess performance and availability of your cloud infrastructure (server, storage, and network resource elements) with default, holistic, easy to navigate dashboards
- Simplify creation of custom reporting with the industry-leading Cognos® reporting tool that includes drag-and-drop ad-hoc reporting capabilities for quick time-to-value
- Tightly integrate with a wide range of Tivoli® business and service management tools

Whether you are just starting out with virtualization, or managing a mature cloud infrastructure, IBM SmartCloud Monitoring provides the tools to help you more effectively and efficiently plan and manage the performance and capacity of your environment, while helping maximize IT cost savings.

Key prerequisites

For details, refer to the Software requirements section.

Planned availability date

- December 16, 2011 - Electronic
- January 3, 2012 - Physical media

Description

IBM SmartCloud Monitoring V7.1 is a holistic solution that delivers end-to-end performance and availability management, with sophisticated capacity planning to optimize your virtual, cloud, and hybrid environments, built on the highly scalable, enterprise-proven IBM Tivoli Monitoring Infrastructure.

The package includes:

- IBM Tivoli Monitoring Infrastructure: The same enterprise monitoring platform proven in the world's largest enterprises, consisting of Tivoli Enterprise Management hub and remote servers, a Tivoli Enterprise Portal server, Tivoli Enterprise Data Warehouse, and various support agents.
- IBM Tivoli Monitoring Operating System Agents: Agents for a wide range of enterprise operating systems, including Microsoft® Windows® and Linux®, which monitor the health and performance of individual virtual machines running within the cloud.
- Virtual Infrastructure (VI) agent: Part of the IBM Tivoli Monitoring for Virtual Enterprises, the VI agent provides remote performance and availability monitoring of VMware ESX, ESXi, and vCenter Server environments. The VI agent remotely monitors the VMware infrastructure by connecting to the Virtual
Center or connecting to stand-alone ESX and ESXi hosts. This agent has been
certified by VMware in the VMware Ready program.

- **Kernel-based agent**: Remote performance and availability monitoring to visualize
  availability, performance, and capacity trends for KVM and hosts. This agent
  remotely monitors KVM by connecting to each host.
- **NetApp Storage agent**: Remote performance and availability monitoring to
  visualize capacity, latency, and throughput performance metrics of NetApp and
  IBM N series storage systems. This offering monitors the Data Fabric Manager
  Server (DFM) and remotely connects to the DFM server to obtain performance
  metrics.
- **Capacity analytics**: A suite of capacity analytics and planning tools for VMware
  infrastructures delivered with IBM Tivoli Monitoring for Virtual Environments and
  features reports and "what-if" placement guidance.

**Proactively manage capacity**

To effectively manage capacity requirements to achieve high availability and
maximize resource utilization, capacity planning needs to occur at the resource level
and from a workload point of view. Capacity planning at the resource level includes:

- **Virtual machine right sizing**: Virtual machines are initially provisioned with
  allocated CPU and memory. By understanding real usage of computing resources
  over time, you can adjust the allocated computing resources to levels needed
  for the virtual machine. In addition, you can view virtual machines that are
  no longer active and de-provision these virtual machines to free up additional
  computing resources.
- **Predicting physical and virtual resource capacity bottlenecks**: Preventing
  performance problems related to capacity constraints includes understanding
  actual usage, allocated capacity, and available capacity for CPU, memory,
  network, and storage resources for clusters, hosts, virtual machines, datastores,
  volumes, host bus adapters (HBA), and network adapters.
- **Workload balancing**: This activity includes comparing usage and available
  capacity across clusters and hosts to determine over-utilized clusters and hosts.

Capacity planning at the workload level includes:

- Using customer-defined policies, along with data on average or peak virtual
  machine performance data, to determine how many virtual machines (or
  workloads running on those virtual machines) can be serviced with the resources
  dedicated to the existing virtual infrastructure.
- Determining if there is enough capacity on a server or cluster and what the delta
  gaps are for adding additional virtual machines. This analysis uses the average
  or peak virtual machines profile or you may input the size of the virtual machines
  that are needed.

IBM SmartCloud Monitoring collects key performance metrics from the cloud
infrastructure and the virtual machines running within it. The collected data that
feeds operational monitoring and capacity planning functions includes CPU, memory,
storage, and network utilization from the cloud, and resource consumption and
process information from the virtual machines. Tivoli Monitoring evaluates these
metrics with default settings and dynamic thresholds and sends alerts about
anomalies and negative trends before service interruptions occur. SmartCloud
monitoring then warehouses this data and reports on capacity trends using Cognos-
based Tivoli Common Reporting. Tivoli Common Reporting provides default what-
if analysis reports for capacity planning in VMware environments but also provides
drag-and-drop capabilities for ad-hoc reporting.

**Product positioning**

Businesses today are challenged to improve IT service delivery and reduce the
costs to deliver services. Virtualization has been a key initiative for businesses that
have deployed to reduce infrastructure costs through improved server utilization, and to
improve services by having the ability to rapidly scale for increases in application
usage. As these virtual infrastructures have grown in scale and in the percentage of enterprise workloads running on them, organizations find themselves in the midst of cloud migrations, or contemplating them. Cloud posture is a logical extension of a virtualized infrastructure, providing an elastic, automated, self-tuning environment for data center and business process consolidation. But such an environment requires sophisticated monitoring and capacity planning tools to track and document that service levels are maintained as consolidation cost savings are pursued.

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<td>5725-F78</td>
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**Education support**

Comprehensive education for IBM Tivoli products is offered through Worldwide Tivoli Education Delivery Services. A wide range of training options are available, including classes led by instructors, learning on demand, on-site training, and blended learning solutions.

For additional information, visit


**Offering Information**

Product information is available via the Offering Information website


Also, visit the Passport Advantage® website


**Publications**

No publications will be shipped with this product.

The IBM Publications Center


The Publications Center is a worldwide central repository for IBM product publications and marketing material with a catalog of 70,000 items. Extensive search facilities are provided. Payment options for orders are via credit card (in the U.S.) or customer number for 20 countries. A large number of publications are available online in various file formats, and they can all be downloaded by all countries, free of charge.

**Technical information**

**Specified operating environment**

**Hardware requirements**

None.
**Software requirements**

IBM SmartCloud Monitoring

**VMware VI Agent:**

- VMware ESX Server V3.5, V4.0, or V5.0
- VMware ESXi Server V3.5, V4.0, or V5.0
- VMware vCenter server V4.0, or V5.0

Runs on these operating systems:

- Red Hat Enterprise Linux (RHEL) 4.0 AS, ES System z®
- Red Hat Enterprise Linux (RHEL) 5.0 Advanced Platform System z
- SUSE Linux Enterprise Server (SLES) 11.0 System z
- SUSE Linux Enterprise Server (SLES) 10.0 System z
- SUSE Linux Enterprise Server (SLES) - 11.0 x86-32
- SUSE Linux Enterprise Server (SLES) - 11.0 x86-64
- Red Hat Enterprise Linux (RHEL) Advanced Platform - 5.0 x86-32
- Red Hat Enterprise Linux (RHEL) Advanced Platform - 5.0 x86-64
- SUSE Linux Enterprise Server (SLES) - 10.0 x86-32
- SUSE Linux Enterprise Server (SLES) - 10.0 x86-64
- Red Hat Enterprise Linux (RHEL) AS, ES - 4.0 x86-32
- Red Hat Enterprise Linux (RHEL) AS, ES - 4.0 x86-64
- Red Hat Enterprise Linux (RHEL) 6.0 AS, ES x86-64
- Red Hat Enterprise Linux (RHEL) 6.0 AS, ES x86-32
- Windows Server 2008 Datacenter Edition - R2 x86-64
- Windows Server 2008 Enterprise Edition - R2 x86-64
- Windows Server 2008 Standard Edition - R2 x86-64
- Windows Server 2008 Datacenter Edition x86-32
- Windows Server 2008 Datacenter Edition x86-64
- Windows Server 2008 Enterprise Edition x86-32
- Windows Server 2008 Enterprise Edition x86-64
- Windows Server 2008 Standard Edition x86-32
- Windows Server 2008 Standard Edition x86-64
- Windows Server 2003 Datacenter Edition x86-32
- Windows Server 2003 Datacenter Edition x86-64
- Windows Server 2003 Enterprise Edition x86-32
- Windows Server 2003 Enterprise Edition x86-64
- Windows Server 2003 Standard Edition x86-64

Prerequisites:

- IBM Tivoli Monitoring V6.2.2 Fix Pack 4, or later
- IBM Tivoli Enterprise Portal

**NetApp Storage Agent:**

- Monitors versions of NetApp DataFabric Manager V3.7, or later

Runs on these operating systems:

- SUSE Linux Enterprise Server (SLES) - 11.0 x86-32
- SUSE Linux Enterprise Server (SLES) - 11.0 x86-64
- Red Hat Enterprise Linux (RHEL) Advanced Platform - 5.0 x86-32
- Red Hat Enterprise Linux (RHEL) Advanced Platform - 5.0 x86-64
- SUSE Linux Enterprise Server (SLES) - 10.0 x86-32
- SUSE Linux Enterprise Server (SLES) - 10.0 x86-64
- Red Hat Enterprise Linux (RHEL) AS, ES - 4.0 x86-32
- Red Hat Enterprise Linux (RHEL) AS, ES - 4.0 x86-64
- Windows Server 2008 Datacenter Edition - R2 x86-64
- Windows Server 2008 Enterprise Edition - R2 x86-64
- Windows Server 2008 Standard Edition - R2 x86-64
- Windows Server 2008 Datacenter Edition x86-32
- Windows Server 2008 Datacenter Edition x86-64
- Windows Server 2008 Enterprise Edition x86-32
- Windows Server 2008 Enterprise Edition x86-64
- Windows Server 2008 Standard Edition x86-32
- Windows Server 2008 Standard Edition x86-64

Prerequisites:
- IBM Tivoli Monitoring V6.2.2 Fix Pack 4, or later
- IBM Tivoli Enterprise Portal

KVM Agent:
- Versions of libvirt 0.6.3, or later

Runs on these operating systems:
- Red Hat Enterprise Linux (RHEL) 5.0 Advanced Platform x86-64
- SUSE Linux Enterprise Server (SLES) 11.0 x86-64
- Red Hat Enterprise Linux (RHEL) 6.0 AS, ES x86-64
- Red Hat Enterprise Linux (RHEL) 6.0 AS, ES x86-32
- Red Hat Enterprise Linux (RHEL) 5.0 Advanced Platform x86-32
- SUSE Linux Enterprise Server (SLES) 11.0 x86-32
- SUSE Linux Enterprise Server (SLES) 10.0 x86-32
- SUSE Linux Enterprise Server (SLES) 10.0 x86-64

Prerequisites:
- IBM Tivoli Monitoring V6.2.2 Fix Pack 4, or later

For IBM Tivoli Monitoring V6.2.3, visit

The program’s specifications and specified operating environment information may be found in documentation accompanying the program, if available, such as a readme file, or other information published by IBM, such as an announcement letter. Documentation and other program content may be supplied only in the English language.

Planning information

Packaging
IBM SmartCloud Monitoring is distributed with:
• International Program License Agreement (Z125-3301)
• License Information document (CT6GAML)
• Media
• Publications (refer to the Publications section)

This program, when downloaded from a website, contains the applicable IBM license agreement and License Information, if appropriate, and will be presented for acceptance at the time of installation of the program. For future reference, the license and License Information will be stored in a directory such as LICENSE.TXT.

Security, auditability, and control

IBM SmartCloud Monitoring V7.1 uses the security and auditability features of the operating system software. The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communication facilities.

Pricing definitions

Virtual Server

Virtual Server is a unit of measure by which the program can be licensed. A server is a physical computer that is comprised of processing units, memory, and input/output capabilities and that executes requested procedures, commands, or applications for one or more users or client devices. Where racks, blade enclosures, or other similar equipment is being employed, each separable physical device (for example, a blade or a rack-mounted device) that has the required components is considered itself a separate server. A virtual server is either a virtual computer created by partitioning the resources available to a physical server or an unpartitioned physical server. Licensee must obtain Virtual Server entitlements for each virtual server made available to the program, regardless of the number of processor cores in the virtual server or the number of copies of the program on the virtual server.

Instead of the entitlements required for the resources used by the program directly, licensee must obtain entitlements for this program sufficient to cover the resources managed by the program.

General charge terms

The program is not licensed for use on unpartitioned physical servers and may be used solely to monitor virtual machines.

Standby or backup systems

For programs running or resident on backup machines, IBM defines three types of situations: cold, warm and hot. In cold and warm situations, a separate entitlement for the copy on the backup machine is normally not required and typically no additional charge applies. In a hot backup situation, the customer needs to acquire other license or entitlements sufficient for that server. All programs running in backup mode must be solely under the customer's control, even if running at another enterprise's location.

As a practice, the following are definitions and allowable actions concerning the copy of the program used for backup purposes.

Cold: A copy of the program may reside, for backup purposes, on a machine as long as the program is not started. There is no additional charge for this copy.

Warm: A copy of the program may reside for backup purposes on a machine and is started, but is idling, and is not doing any work of any kind. There is no additional charge for this copy.
**Hot:** A copy of the program may reside for backup purposes on a machine, is started, and is doing work. The customer must acquire a license or entitlements for this copy and there will generally be an additional charge.

Doing work includes, for example, production, development, program maintenance, and testing. It also could include other activities such as mirroring of transactions, updating of files, synchronization of programs, data or other resources (for example, active linking with another machine, program, database or other resource, and so on), or any activity or configurations that would allow an active hot switch or other synchronized switch over between programs, databases, or other resources to occur.

In the case of a program or system configuration that is designed to support a high availability environment by using various techniques (for example, duplexing, mirroring of files, or transactions, maintaining a heartbeat, active linking with another machine, program, database, or other resource), the program is considered to be doing work in the hot situation and a license or entitlement must be purchased.

**Pricing example**

**Small machine:**
- Intel® x86 - 2 socket - dual core
- 6 virtual machines
- IBM SmartCloud Monitoring licenses to purchase: 6

**Medium machine:**
- Intel x86 - 2 socket - quad core
- 12 virtual machines
- IBM SmartCloud Monitoring licenses to purchase: 12

**Large machine:**
- Intel x86 - 4 socket - quad core
- 24 virtual machines
- IBM SmartCloud Monitoring licenses to purchase: 24

**Extra large machine:**
- Power® 7 - 8 socket - quad core
- 48 virtual machines
- IBM SmartCloud Monitoring licenses to purchase: 48

**Passport Advantage for the distributed product**

Through the Passport Advantage Agreement, you may receive discounted pricing based on their total volume of eligible products, across all IBM brands, acquired worldwide. The volume is measured by determining the total Passport Advantage points value of the applicable acquisitions. Passport Advantage points are only used for calculating the Entitled Passport Advantage discount.

Use the following two-step process to determine the total Passport Advantage points value:

1. Analyze your environment to determine the number of charge units for a product. The quantity of each product’s part numbers to be ordered is determined by that analysis.
2. Order the Passport Advantage part numbers. A Passport Advantage point value, which is the same worldwide for a specific part number regardless of where the order is placed, is assigned to each IBM Tivoli product part number. The Passport Advantage point value for the applicable part number, multiplied by
the quantity for that part number, will determine the Passport Advantage points for that IBM Tivoli product part number. The sum of these Passport Advantage points determines the Passport Advantage point value of the applicable IBM Tivoli product authorizations, which then may be aggregated with the point value of other applicable Passport Advantage product acquisitions to determine the total Passport Advantage points value.

The discounted pricing available through Passport Advantage is expressed in the form of Suggested Volume Prices (SVPs), which vary depending on the SVP level. Each SVP level is assigned a minimum total Passport Advantage point value, which must be achieved, in order to qualify for that SVP level.

Media packs and documentation packs do not carry Passport Advantage points and are not eligible for SVP discounting.

For additional information on Passport Advantage, refer to the following

http://www.ibm.com/software/passportadvantage

The following Passport Advantage part number categories may be orderable:

- License and Software Subscription and Support 12 Months - This is the product authorization with Software Subscription and Support to the first anniversary date.
- Software Subscription and Support Annual Renewal - This is the Software Subscription and Support renewal for one anniversary that applies when a customer renews their existing coverage period prior to the anniversary date at which it expires.
- Software Subscription and Support Reinstatement 12 months - This is for customers who have allowed their Software Subscription and Support to expire, and later wish to reinstate their Software Subscription and Support.
- Media packs - These are the physical media, such as CD-ROMs, that deliver the product's code.
- Documentation packs - These contain printed documentation such as the User's Guide and Release Notes.

Ordering information

This product is only available via Passport Advantage. It is not available as shrinkwrap.

Product group: Availability and Performance Products
Product Identifier Description:
  5725-F78       IBM SmartCloud Monitoring
Product category:   Tivoli Monitoring products

Current licensees

New licensees
Orders for new licenses will be accepted now.

Shipment will begin on the planned availability date.

Basic license

Ordering information for Passport Advantage

Passport Advantage allows you to have a common anniversary date Software Subscription and Support (SW S&S) renewals, which can simplify management and budgeting for eligible new versions and releases (and related technical support) for your covered products. The anniversary date, established at the start of your Passport Advantage Agreement, will remain unchanged while your Passport Advantage Agreement remains in effect. New software purchases will initially
include twelve full months of Software Subscription and Support (also referred to as Software Maintenance). Software Subscription and Support in the second year (the first year of renewal) can be prorated to be coterminous with your common anniversary date. Thereafter, all Software Subscription and Support (Software Maintenance) will renew at the common anniversary date for twelve full months of Software Subscription and Support (Software Maintenance).

Refer to the IBM International Passport Advantage Agreement and to the IBM Software Support Handbook for specific terms relating to, and a more complete description of, technical support provided through Software Subscription and Support (Software Maintenance).

The quantity to be specified for the Passport Advantage part numbers in the following table is per required number of Processor Value Units. To order for Passport Advantage, specify the desired part number and quantity.

IBM SmartCloud Monitoring V7.1

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To order a media pack for Passport Advantage, specify the part number in the desired quantity from the following table:

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IBM SmartCloud Monitoring is also available, via web download, from Passport Advantage.

Terms and conditions

The information provided in this announcement letter is for reference and convenience purposes only. The terms and conditions that govern any transaction with IBM are contained in the applicable contract documents such as the IBM International Program License Agreement, IBM International Passport Advantage Agreement, and the IBM Agreement for Acquisition of Software Maintenance.

This product is only available via Passport Advantage. It is not available as shrinkwrap.

Licensing

IBM International Program License Agreement including the License Information document and Proof of Entitlement (PoE) govern your use of the program. PoEs are required for all authorized use. Part number products only, offered outside of Passport Advantage, where applicable, are license only and do not include Software Maintenance.

These programs are licensed under the IBM Program License Agreement (IPLA) and the associated Agreement for Acquisition of Software Maintenance, which provide for support with ongoing access to releases and versions of the program. IBM includes one year of Software Subscription and Support (also referred to as Software Maintenance) with the initial license acquisition of each program acquired. The initial period of Software Subscription and Support (also referred to as Software Maintenance) can be extended by the purchase of a renewal option, if available. These programs have a one-time license charge for use of the program.
and an annual renewable charge for the enhanced support that includes telephone assistance (voice support for defects during normal business hours), as well as access to updates, releases, and versions of the program as long as support is in effect.

**License Information form number**
CT6GAML.

The program’s License Information will be available for review on the IBM Software License Agreement website


**Limited warranty applies**
Yes

**Limited warranty**
IBM warrants that when the program is used in the specified operating environment, it will conform to its specifications. The warranty applies only to the unmodified portion of the program. IBM does not warrant uninterrupted or error-free operation of the program or that IBM will correct all program defects. You are responsible for the results obtained from the use of the program.

IBM provides you with access to IBM databases containing information on known program defects, defect corrections, restrictions, and bypasses at no additional charge. For further information, consult the IBM Software Support Handbook found at

http://www.ibm.com/support/handbook

IBM will maintain this information for at least one year after the original licensee acquires the program (warranty period).

**Program technical support**
Technical support of a program product version or release will be available for a minimum of five years from the general availability date, as long as your Software Subscription and Support (also referred to as Software Maintenance) is in effect. This technical support allows you to obtain assistance (via telephone or electronic means) from IBM for product-specific, task-oriented questions regarding the installation and operation of the program product. Software Subscription and Support (Software Maintenance) also provides you with access to updates (modifications or fixes), releases, and versions of the program. You will be notified, via announcement letter, of discontinuance of support with 12 months' notice. If you require additional technical support from IBM, including an extension of support beyond the discontinuance date, contact your IBM representative or IBM Business Partner. This extension may be available for a fee.

**Money-back guarantee**
If for any reason you are dissatisfied with the program and you are the original licensee, you may obtain a refund of the amount you paid for it, if within 30 days of your invoice date you return the program and its PoE to the party from whom you obtained it. If you downloaded the program, you may contact the party from whom you acquired it for instructions on how to obtain the refund.

For clarification, note that (1) for programs acquired under the IBM International Passport Advantage offering, this term applies only to your first acquisition of the program and (2) for programs acquired under any of IBM's On/Off Capacity on Demand (On/Off CoD) software offerings, this term does not apply since these offerings apply to programs already acquired and in use by you.
Other terms

Volume orders (IVO)
Yes. Contact your IBM representative.

IBM International Passport Advantage Agreement

Passport Advantage applies
Yes, and through the Passport Advantage website at

http://www.ibm.com/software/passportadvantage

Software Subscription and Support (Software Maintenance) applies
Yes. Software Subscription and Support (also referred to as Software Maintenance) is included with licenses purchased through Passport Advantage and Passport Advantage Express®. Product upgrades and Technical Support are provided by the Software Subscription and Support (Software Maintenance) offering as described in the Agreements. Product upgrades provide the latest versions and releases to entitled software and Technical Support provides voice and electronic access to IBM support organizations, worldwide.

IBM includes one year of Software Subscription and Support (Software Maintenance) with each program license acquired. The initial period of Software Subscription and Support (Software Maintenance) can be extended by the purchase of a renewal option, if available.

While your Software Subscription and Support (Software Maintenance) is in effect, IBM provides you assistance for your routine, short duration installation and usage (how-to) questions, and code-related questions. IBM provides assistance via telephone and, if available, electronic access, only to your information systems (IS) technical support personnel during the normal business hours (published prime shift hours) of your IBM support center. (This assistance is not available to your end users.) IBM provides Severity 1 assistance 24 hours a day, 7 days a week. For additional details, consult your IBM Software Support Handbook at

http://www.ibm.com/support/handbook

Software Subscription and Support (Software Maintenance) does not include assistance for the design and development of applications, your use of programs in other than their specified operating environment, or failures caused by products for which IBM is not responsible under the applicable agreements.

For additional information about the International Passport Advantage Agreement and the IBM International Passport Advantage Express Agreement, visit the Passport Advantage website at

http://www.ibm.com/software/passportadvantage

System i Software Maintenance applies
No

Variable charges apply
No

Educational allowance available
Not applicable.
IBM Electronic Services

IBM has transformed its delivery of hardware and software support services to help you achieve higher system availability. Electronic Services is a web-enabled solution that offers an exclusive, no-additional-charge enhancement to the service and support available for IBM servers. These services are designed to provide the opportunity for greater system availability with faster problem resolution and preemptive monitoring. Electronic Services comprises two separate, but complementary, elements: Electronic Services news page and Electronic Services Agent.

The Electronic Services news page is a single Internet entry point that replaces the multiple entry points traditionally used to access IBM Internet services and support. The news page enables you to gain easier access to IBM resources for assistance in resolving technical problems.

The Electronic Service Agent™ is no-additional-charge software that resides on your server. It monitors events and transmits system inventory information to IBM on a periodic, client-defined timetable. The Electronic Service Agent automatically reports hardware problems to IBM. Early knowledge about potential problems enables IBM to deliver proactive service that may result in higher system availability and performance. In addition, information collected through the Service Agent is made available to IBM service support representatives when they help answer your questions or diagnose problems. Installation and use of IBM Electronic Service Agent for problem reporting enables IBM to provide better support and service for your IBM server.

To learn how Electronic Services can work for you, visit

http://www.ibm.com/support/electronic

Prices

For all local charges, contact your IBM representative.

Business Partner information

If you are an IBM Business Partner -- Distributor for Workstation Software acquiring products from IBM, you may link to Passport Advantage Online for resellers where you can obtain Business Partner pricing information. An IBM ID and password are required.

http://www.ibm.com/partnerworld/sg/apchannounce/

Passport Advantage

For Passport Advantage and charges, contact your IBM representative or your authorized IBM Business Partner. Additional information is also available at

http://www.ibm.com/software/passportadvantage

AP distribution

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Japan IOT                    Yes
Japan                       Yes

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