



IBM i 7.1 delivers database, management, virtualization, and Web application serving enhancements

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At a glance

IBM® i 7.1 includes the following new enhancements:

- DB2® for i enhancements including XML support and enablement of column-level encryption
- IBM i storage management enhancements for automatic data placement for solid-state drives (SSDs)
- IBM i virtual partition enhancements via IBM i and PowerVM™ VIOS
- Enhancements to Web application serving technologies including Apache, Java™, Integrated Web Application Server, Integrated Web Services Server, and Zend PHP environment
- Enhancements to Systems Director Navigator for i for management of IBM i
- IBM i integration with BladeCenter® and System x® via iSCSI technology enhancements with support for software target support

For ordering, contact your IBM representative, an IBM Business Partner, or IBM Americas Call Centers at 800-IBM-CALL (Reference: AE001).

Overview

IBM i, running on an IBM Power Systems™ server, offers a highly scalable and virus-resistant architecture with a proven reputation for exceptional business resiliency. Running business applications based on IBM i has helped companies over many years to focus on innovation and delivering new value to their business, not on managing their data center operations.

IBM i 7.1 delivers database, management, virtualization, and Web application serving enhancements, enabling clients to reduce costs, improve service, and manage risk of their IT infrastructure.

The integrated DB2 database for IBM i is enhanced with support for XML, enabling clients to store and search XML documents within DB2 for i and to create XML documents from relational data. DB2 for i is also enabled to support the calling of field procedures, which can allow a partner application to transparently encrypt a specific column in a database table, enabling clients to further protect sensitive information.

IBM i storage management further leverages SSD technology by automatically moving data that is accessed most frequently to SSDs to help clients improve application performance.

IBM i virtualization support is enhanced to offer increased flexibility for running multiple IBM i releases on a single server to support a broad scope of applications as well as to simplify the migration to IBM i 7.1. Specifically, PowerVM VIOS or IBM i 6.1 can host the storage of IBM i 7.1 partitions. In addition, IBM i 7.1 can host the storage of IBM i 6.1, AIX®, and Linux® partitions.

IBM i Web application serving technologies are enhanced with updates to Apache, Java, Integrated Web Application Server, Integrated Web Services Server, and Zend Hypertext Preprocessor (PHP) environment, enabling clients to extend existing applications to the Web, improving service provided to clients, suppliers, and partners.

IBM i integration with BladeCenter and System x via iSCSI technology is enhanced with support for software target support, additional operating system support (VMware VSphere 4.0, Windows® Server 2008 R2) and a new installation wizard.

IBM i 7.1 is supported on Power Systems servers and blades with POWER7™ processors, Power Systems servers and blades with POWER6/6+ processors, System i® servers with POWER6™ processors, and System i servers with POWER5/5+ processors.

Upgrades to IBM i 7.1 are supported from IBM i 5.4 and i 6.1, including all supported machine code levels for those releases.

The BladeCenter PS700 is in the IBM i P05 processor group. The BladeCenter PS701 is in the IBM i P10 processor group and the BladeCenter PS702 is in the IBM i P10 processor group.

IBM i software value packs is updated to allow value pack ordering with IBM i 7.1 products.

Planned availability date

April 23, 2010

Description

- DB2 enhancements
 - DB2 for i 7.1 adds support for the XML data type. This includes defining it as a column, passing it as parameters to routines, and using it as a variable. It also includes the ability to search these documents using the enhanced XML capability that exists in the OmniFind™ Text Search. In addition, XML documents can be decomposed (shredded) into relational columns based on annotations within an XML Schema. An XML Schema Repository is introduced to store information about an XML Schema to allow for document validation or decomposition.

DB2 for i 7.1 also contains functions needed to generate XML from relational information. These XML publishing functions allow a developer to retrieve information from the relational database and generate/publish this information as a well-formed XML document, including the elements, attributes, and comments typically found in an XML document.
 - DB2 for i also adds the ability to call a field procedure (exit routine) that can modify the contents and size of the data on insert, update, and read operations. This capability can be used in many ways, but the most popular way will be to provide encryption of data based on business logic. For example, adding an encryption/decryption field procedure to a specific column of a file would then

cause that file to be encrypted with no application changes. At insert or update time, the field procedure will encrypt the data, while at read time, the field procedure could choose to decrypt or not based on criteria that is within the procedure.

- For application developers, DB2 for i enhancements such as MERGE, Array support, Global Variables, and the REPLACE option on CREATE allow for more powerful and efficient programming. The Currently Committed option allows an application to avoid update locks while still retrieving a consistent view of the data by having the database find the version of the data that has already been committed and not waiting for the current update to commit or roll back.

With i 7.1, transactions can now span Independent Auxiliary Storage Pools (IASPs), allowing for a more gradual migration of data and business logic to IASPs. Creation of a three-part alias that includes the remote system will remove the requirement to connect to the remote systems as the database will do that implicitly for the client application.

New functions, including WebSphere® MQ functions, allow the developer to add capabilities into their applications. Incorporating SQL into existing applications is easier in i 7.1 with the ability to consume result sets within RPG, COBOL, and C and C++ routines.

- IBM i 7.1 delivers performance enhancements for the database. Adaptive Query Processing (AQP) builds on top of the leading-edge SQL Query Engine to allow the database to detect whether a query is using a suboptimal plan -- and then modify that plan while the query is running to significantly improve performance.

SQE also supports select/omit logical files, logical files in the FROM clause and sparse indexes in 7.1, allowing more queries to reap the benefits of SQE. Encoded Vector Indexes (EVIs) can now contain summary information, allowing for superior indexing strategies, particularly in a data warehousing environment. In addition to the ability to place tables on solid-state drives (SSD), which is supported in IBM i 6.1, a file can now be marked as in-memory to reduce the IO cost when reading that file. Also, supporting expressions on the CALL statement and the ability to inline some user-defined functions (UDFs) will provide a performance boost in some applications.

- For the administrator, new tooling is added to monitor long-running operations such as an index build, a text search index build, ALTER TABLE, and reorganize. The SQL_CANCEL procedure is added to cancel long-running queries. The type of I/O (Random or Sequential) executed against a file is now available, providing more information when making the determination about whether to place a certain file on SSD. Partitioned tables are an option in more environments in i 7.1 so tables with identity columns and referential constraints can now be partitioned.
- STRJRNLIB and CHGJRNOBJ now allow name criteria to be specified, giving clients additional flexibility to control what journaling gets started implicitly. By applying PTF MF49429, Remote Journaling is significantly enhanced with filtering capability to control which entries get sent, reducing the network bandwidth required. Remote journaling allows an automatic restart when it ends because of a communications failure.

- Storage management

- IBM i storage management is enhanced to further exploit the I/O performance delivered through SSD. Through storage management and DB2 advanced placement support, IBM i can help clients get the right data onto the SSDs to improve the performance of long-running batch jobs and queries.
- IBM i hierarchical storage management support is enhanced through the automatic collection of I/O performance data and the movement of the most active data to SSDs. Now clients can predetermine when they want to trace I/O activity and balance data between SSDs and hard disk drives (HDD).
- IBM i storage management is enhanced:
 - To more efficiently identify and be faster in moving hot data to the SSDs
 - To enable setting the priority with which data is moved to SSDs

- To sweep SSDs and move objects that do not belong based on media preference to HDDs
- To offer command options to move cold data off SSD and hot data onto the SSD
- Virtualization of I/O resources including storage can reduce costs while improving IT infrastructure flexibility. There are multiple I/O virtualization options available to IBM i partitions running on Power Systems.
 - IBM i 6.1.1 partition can host I/O resources for another IBM i 7.1 or 6.1 partition on POWER6 or POWER7 processor-based servers.
 - IBM i 7.1 partition can host I/O resources for another IBM i 7.1 or 6.1.1 partition on POWER6 or POWER7 processor-based servers.
 - IBM i 7.1 partition can also host I/O resources for AIX 5.2, 5.3, and 6.1 partitions, and Linux (SLES 9, SLES 10, SLES 11, RHEL 4, and RHEL 5) partitions on POWER5™, POWER6, or POWER7 processor-based servers.
 - PowerVM VIOS 2.1.3 provides virtualization capabilities and can host I/O resources for IBM i 7.1 and 6.1 partitions on POWER6 and POWER7 processor-based servers and blades.
 - PowerVM VIOS 2.1.3 with IBM i 7.1 and 6.1.1 partitions supports adding a virtual Fibre Channel adapter into an Active Memory™ Sharing environment.
 - IBM i 6.1.1 with MF47832 and MF48674 or IBM i 7.1.0 with GA CUM applied and PowerVM VIOS 2.1.3 now support the following tape media libraries via NPIV:
 - 3573 (TS3100/TS3200) with LTO3 and LTO4 tape drives
 - 3576 (TS3310) with LTO3 and LTO4 tape drives
 - 3577 (TS3400) with TS1120 and TS1130 tape drives
 - 3584 (TS3500) with LTO3, LTO4, TS1120, TS1130, and 3592-J1A tape drives
- Web application serving
 - The IBM HTTP Server for i continues to be based on Apache HTTP Server. An updated, PCI-compliant release of Apache is included with IBM i 7.1.
 - IBM i 7.1 supports updated IBM Technology for Java 32- and 64-bit environments. The Java Development Kit (JDK) also referred to as the classic version of Java is no longer included with IBM i 7.1. All Java-based applications should be migrated to the IBM technology version of Java prior to the upgrade or installation of IBM i 7.1.
 - The IBM i Web administration interface is enhanced. A client is no longer required to have *ALLOBJ special authority to create and manage Web application servers. An administrator can now grant developers and operators *permission* to create and manage Web application servers. Enhancements are also made to make it easier to monitor, search, and receive notification of the contents of log files for Web-based servers.
 - The Integrated Web Application Server is enhanced to support the latest versions of Java available with IBM i 7.1.
 - The Integrated Web Services Server is enhanced, providing significant performance improvements for the Web Services runtime environment. In addition, the Web Services run time now supports static Web Services Description Language (WSDL), recognizing WSDL files that have been created and updated by the user. Using the Web Administration interface, users can modify the automatically generated WSDL file and use this customized file.
 - Zend Server Community Edition for i is preloaded with IBM i 7.1, 6.1, and 5.4. Zend Server Community Edition for i is available to IBM i clients with one year of Silver support from Zend for no additional charge. Register at zend.com in order to enable the one year of Silver support. Zend Server Community Edition for i replaces Zend Core for i and provides additional functionality, integration with IBM i, and enhanced performance. Zend Server Community Edition uses FastCGI support between ILE Apache and PHP, which eliminates the second copy of Apache and reverse proxy requirements from the software environment needed to run PHP on IBM i. Zend Server Community Edition for i also provides a Java connector, byte code acceleration, and a caching API. Zend Server Community Edition for i is also available from Zend at zend.com.
- Systems management

- Systems Director Navigator for i is enhanced to allow clients to work with multiple systems from a single interface using the 'Set Target System' support. From the Web-based Systems Director Navigator interface, a client can manage a different IBM i system or partition by selecting the target system. Once this new system or partition has been selected, all data returned to the Director Navigator interface is for this new system or partition. System Director Navigator for i 7.1 can manage a target IBM i 5.4, 6.1, or 7.1 system or partition. With the Set Target System feature, the Systems Director Navigator management server runs in one place; one browser can be used to manage multiple environments and management is extended to IBM i 5.4 environments.
- Systems Director Navigator for i now includes 5250 emulation portlet. Users can now access a 5250 window from the Systems Director Navigator interface, making it easier to use a single interface for managing IBM i systems.
- Systems Director Navigator for i, Performance Data Investigator is enhanced to include Disk Response Time bucket perspectives and an IBM Technology for Java Memory perspective.
- Availability enhancements
 - With IBM i 7.1, Auxiliary Storage Pool (ASP) encryption can be enabled or disabled at any time. In previous releases, encryption could only be enabled at the time the ASP was configured. In addition, with IBM i 7.1 the ASP encryption key can now be changed.
- Integration with BladeCenter and System x
 - IBM i integration with BladeCenter and System x via iSCSI technology is enhanced with support for software target support, additional operating systems (VMware VSphere 4.0 and Windows Server 2008 R2), and a new installation wizard.
 - Software target: IBM i integration with BladeCenter and System x via iSCSI technology is enhanced with support for Software Target. The solution supports a 1Gb/10Gb Ethernet connection between IBM i and BladeCenter and System x servers, which can improve performance and lower the cost of the solution. IBM i uses standard Power Systems Ethernet network interface cards to provide the iSCSI connection for the BladeCenter and System x servers.

IBM i supports running iSCSI software targets along with iSCSI hardware targets. Software target also supports both iSCSI hardware initiators and iSCSI software initiators. To take advantage of 10 Gb Ethernet speeds, the software initiator is required on the BladeCenter and System x servers.
- Additional operation systems
 - VMware ESX 4.0 - i 6.1 / i 7.1 (hardware initiator only)
 - VMware ESXi Embedded 4.0 - i 7.1 (hardware initiator only)
 - Windows Server 2008 R2 - i 6.1 / i 7.1
- Installation wizard: IBM i integration with BladeCenter and System x is enhanced with an installation wizard launched from the IBM Systems Director Navigator for i browser interface.
- Networking enhancements
 - Dynamic Host Configuration Protocol (DHCP) server for IBM i is now based on the Internet Systems Consortium (ISC) DHCP server, which contains support for IPv6 and DHCP failover.
 - IPv6 support for the DHCP Client, Point-to-point protocol (PPP), Layer 2 Tunneling Protocol (L2TP), and Remote Authentication Dial In User Service (RADIUS).
 - Support for the Internet Key Exchange version 2 (IKEv2) tunneling protocol in the IBM i Virtual Private Networking (VPN) support.
 - Telnet Client support on IBM i is now SSL-enabled.
- Transform services
 - IBM Transform Services for i (5770-TS1) delivers Adobe® Portable Document Format (PDF) output support to IBM i applications. Transform Services is shipped with IBM i. The following enhancements are made in i 7.1:
 - Support to transform existing Spool Files to PDF format.

- Additional bar codes: The AFP-to-PDF transform can now render all the bar code types listed for the DDS BARCODE keyword. These include the popular USPS Intelligent Mail and 2D bar code symbols.
- AFP™ font support: The transform will convert AFP font resource objects to Type 1 or Type 3 fonts embedded in the PDF to preserve text content and appearance. This new feature provides text support for many additional languages.
- The Host Print Transform (QwpzHostPrintTransform) API is enhanced to use Transform Services to enable customer applications to convert existing *AFPDS and *SCS spooled files to PDF. Refer to the API documentation in the IBM i Information Center for details.
- Network upgrade enhancements
 - IBM i can now be upgraded from an image on the network. An IBM i 6.1 environment on POWER6 processor-based server can be upgraded to IBM i 7.1 with an image on a network file server. See information APAR II14482 for PTF and setup information.
- Install media changes
 - IBM i 7.1 supplied DVD media sets now consist of three unique language groups. Each language group will contain approximately one-third of the supported 51 languages. See information APAR II14482 for PTF and setup information.
- Program conversion

Starting with i 6.1, IBM uses machine interface (MI) architecture to significantly improve programs. Both new and previously existing programs can take advantage of the latest system enhancements, including even stronger system integrity, improved performance, and a range of new operating system and processor capabilities. To make these improvements, all MI programs created for a release before 6.1 must be converted, in order to run on i 6.1, 7.1 or a later release. MI programs include Integrated Language Environment® (ILE) and original program model (OPM) programs.

To convert a program, its creation data (a subset of observability) must be available. MI programs retain creation data by default, so most programs can be converted, going all the way back to programs originally created for System/38™. Even if an option was taken to remove creation data from external access, Licensed Internal Code (LIC) can still access the creation data if the target releases of the program and its constituent modules are V5R1, or later. So, a program may lack sufficient creation data for conversion when the program or at least one of its modules was created for OS/400® V4R5 or an earlier release and creation data was explicitly removed. Clients and ISVs are responsible for ensuring that programs have creation data for the conversion process.

To help plan for your upgrade from a release before i 6.1 to 6.1 or a later release, a new command, ANZOBJCVN, is available for i 5.4 or i5/OS® V5R3 to check your programs. First download the appropriate ANZOBJCVN PTFs from IBM. ANZOBJCVN identifies programs that do not convert, if any, and estimate the times required for program conversions. It also includes information about two other types of conversions: integrated file system names and spooled files. For more information, refer to the IBM Redpaper REDP-4293, *IBM i Program Conversion: Getting Ready for 6.1 and Beyond*, by visiting

<http://www.redbooks.ibm.com/redpapers/abstracts/redp4293.html>

This document includes PTF numbers and much more information about conversions and ANZOBJCVN.

- IBM i value packs

The following IBM i software value packs are updated to allow value pack ordering with IBM i 7.1 products:

 - IBM i operating system Value Pack™ (5722-IVP)
 - DB2 Value Pack for i (5722-DVP)

- Operations Value Pack for i (5722-SVP)

With value packs for IBM i, you can order the software packages you need at a reduced price, compared to the price of the individual products.

The IBM i operating system Value Pack (5722-IVP) includes:

- One processor entitlement for IBM i 7.1, i 6.1, or i 5.4
- IBM i Access unlimited user entitlement
- Service and education vouchers

To view the list of Power® servers eligible to order the IBM i operating system Value Pack and the number of vouchers included, visit

<http://www.ibm.com/systems/power/hardware/vouchers/>

The DB2 Value Pack for i (5722-DVP) can be ordered for IBM i 7.1, i 6.1, or i 5.4 and includes:

- DB2 Query Manager and SQL Development Kit
- DB2 Symmetric Multiprocessing (SMP)
- DB2 Extenders™
- XML Toolkit

The Operations Value Pack for i (5722-SVP) can be ordered for IBM i 7.1, i 6.1, or i 5.4 and includes:

- Backup, Recovery and Media Services (BRMS)
- BRMS Network Features
- Media and Storage Extensions
- Performance Tools
- Performance Tools Manager
- Hardware requirements

IBM i 7.1 is supported on the following systems:

- Power 750, 770, 780 and BladeCenter PS700, PS701, and PS702
- Power 520, 550, 560, 570, 595 and BladeCenter JS12, JS22, JS23, and JS43
- System i 515, 520, 525, 550, 570, and 595

IBM Universal Manageability Enablement 3.1

The Common Information Model (CIM) standard allows seamless systems management across platform and domain. CIM, adopted and evolved by the Distributed Management Task Force (DMTF), is a published systems management standard. CIM defines management information between differing management applications, running in many different operating environments. This interchange takes place through the CIM Object Manager (CIMOM), an object management engine that exists between the managed system and the management application. For IBM i 7.1, CIMOM as part of the IBM Universal Manageability Enablement. Secure connections are supported, IPv6 is enabled, DMTF CIM schema is updated to 2.21, and many additional IBM i resources are instrumented for management. The breadth and scope of CIM instrumentation continues to be a focus of IBM i.

The following new functions are supported:

- Security update
- CMPI 2.0 currency
- DMTF Indications Profile (Reliable Indication Delivery)
- OOP performance enhancement

- Binary protocol support
- DMTF CIM schema 2.21 support
- Auto-start CIM server
- Enhanced tracing and logging

Accessibility by people with disabilities

A U.S. Section 508 Voluntary Product Accessibility Template (VPAT) containing details on accessibility compliance can be requested at

http://www.ibm.com/able/product_accessibility/index.html

Product positioning

IBM i 7.1 is the latest version of the IBM i operating environment. IBM i runs on an IBM Power Systems server and offers a highly scalable and virus resistant architecture with a proven reputation for exceptional business resiliency. Companies that run applications based on IBM i are able to focus on innovation and delivering new value to their business, not on managing their data center operations.

IBM i provides a fully integrated and trusted combination of relational database, security, Web services, networking and storage management capabilities required to run business applications. For example, IBM installs and integrates the SQL standards-based DB2 database for IBM i with advanced database management utilities, plus additional middleware components such as multiple file system options, directory capability, an HTTP Web-server powered by Apache, a Web application server, and a Web-services environment.

IBM develops, fully tests, and pre-loads these core middleware components of IBM i together. The pre-integration and testing of IBM i is a key factor in enabling companies to realize lower operations costs by deploying applications faster and maintaining them with fewer staff.

Virtualization and workload management are also built into the IBM i operating environment to enable businesses to consolidate and run multiple applications and components together on the same system, driving up system utilization and delivering a better return on IT investments. This broad and highly stable database and middleware foundation is ideal for efficiently.

Statement of direction

IBM currently intends to deliver a version of WebSphere Commerce for servers running the IBM i 7.1 operating system based on the currently available WebSphere Commerce V7 release made available October 30, 2009.

IBM plans to deliver a new capability for IBM i to verify application runtime attributes to help ensure consistent performance and deployment of new workloads.

The information regarding potential future products is intended to outline our general product direction and it should not be relied on in making a purchasing decision. The information mentioned regarding potential future products is not a commitment, promise, or legal obligation to deliver any material, code or functionality. Information about potential future products may not be incorporated into any contract. The development, release, and timing of any features or functionality described for our products remains at our sole discretion.

All statements regarding IBM's plans, directions, and intent are subject to change or withdrawal without notice.

Reference information

- Software Announcement [210-074](#), dated April 13, 2010
- Software Announcement [210-105](#), dated April 13, 2010
- Software Announcement [210-114](#), dated April 13, 2010
- Software Announcement [210-120](#), dated April 13, 2010

Program number

Program number	Version	Program name
5770-SS1	7.1	IBM i
5770-SSA	7.1	IBM i Per Processor Billing
5770-SSB	7.1	IBM i Application Server Billing
5770-SSC	7.1	IBM i Per User Billing
5722-IVP		IBM i operating system Value Pack
5722-DVP		DB2 Value Pack for i
5722-SVP		Operations Value Pack for i

Product identification number

Program PID number	Maintenance 1-year PID number	Maintenance 3-year PID number
5770-SS1	5733-SPP	5733-SP3/5733-SPE

Other products shipped with IBM i

The following products are also shipped with the IBM i operating system:

- IBM Business Solutions
- IBM HTTP Server for i
- IBM Developer Kit for Java
- IBM Network Authentication Enablement for i
- IBM Portable Utilities for i
- IBM TCP/IP Connectivity Utilities for i
- IBM Transform Services for i
- IBM Universal Manageability Enablement for i
- IBM i Access for Windows
- Zend Server Community Edition for i

Offering Information

Product information is available via the Offering Information Web site

<http://www.ibm.com/common/ssi>

Business Partner information

If you are a Direct Reseller - System Reseller acquiring products from IBM, you may link directly to Business Partner information for this announcement. A PartnerWorld® ID and password are required (use IBM ID).

<https://www.ibm.com/partnerworld/mem/sla.jsp?num=210-077>

Publications

No publications are shipped with this programs.

With the IBM Systems Information Center, users can use a single information center to access product documentation for IBM Systems hardware, operating systems, and server software. Through a consistent framework, users can efficiently find information and personalize their access to that information. The IBM Systems Information Center is at

<http://www.ibm.com/systems/i/infocenter/>

Technical information

Specified operating environment

Hardware requirements

IBM i 7.1 is supported on the following Power processor-based servers and blades:

- POWER7: 8233-E8B, 9117-MMB, 9179-MHB, 8406-70Y, and 8406-71Y
- POWER6/6+: 9407-M15, 9408-M25, 9409-M50, 8203-E4A, 8204-E8A, 8234-EMA, 8261-E4S, 9406-MMA, 9117-MMA, 9119-FHA, 7998-60X, 7998-61X, 7778-23X
- POWER5/5+: 9405-520, 9407-515, 9406-520, 9406-525, 9406-550, 9406-570, and 9406-595

Software requirements

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

Planning statements provide insight into IBM's current plans, directions, and intent, and are subject to change or withdrawal without notice. Any reliance on these planning statements is at the relying party's sole risk and will not create liability or obligation for IBM.

IBM plans to withdraw the AT&T dial accounts for connecting to IBM for electronic customer support requests. These AT&T dial accounts will no longer be available for use with the release following IBM i 7.1. If you were creating your service configuration with a local dial or remote dial connection type and using the IBM-supplied AT&T telephone numbers, you will be affected by this change. It is recommended to connect to IBM with a direct internet connection for electronic

customer support requests. If you must continue to use a dial account, you will need to use your own Internet Service Provider (ISP) beginning with the release after i 7.1. You can make this change now with the current IBM i release you are running on your system.

IBM plans for i 7.1 to be the final release to support the Communications Trace Analyzer plug-in to IBM i Navigator. An enhancement in the i 6.1 release (PTF SI33685) allows a communications trace to be dumped into the Packet Capture (PCAP) format used by other trace analysis tools. It is recommended that you use a tool that can analyze the communications trace data in PCAP format rather than the communications trace analyzer. In the i 6.1 release, you need to create a data area named QCMNTRCPCP in library QGPL prior to issuing the Dump Communications Trace (DMPCMNTRC) CL command. The existence of this data area will result in the data being dumped in the PCAP format. In the i 7.1 release, the DMPCMNTRC command has a new Stream file format keyword, FORMAT, where *PCAP can be specified.

Refer to the following Web site for additional planning information for IBM i 7.1

<http://www.ibm.com/systems/support/i/planning/upgrade/index.html>

Direct customer support

For technical support or assistance, contact your IBM representative or visit

<http://www.ibm.com/support>

Packaging

IBM i 7.1 is shipped on DVD and is also available for download using the Entitled Software Support Web Site

<http://www.ibm.com/servers/eserver/ess>

This program, when downloaded from a Web site, 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 i uses the security and auditability features of the IBM i.

The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communication facilities.

Software Services

IBM Software Services has the breadth, depth, and reach to manage your services needs. You can leverage the deep technical skills of our lab-based, software services team and the business consulting, project management, and infrastructure expertise of our IBM Global Services team. Also, we extend our IBM Software Services reach through IBM Business Partners to provide an extensive portfolio of capabilities. Together, we provide the global reach, intellectual capital, industry insight, and technology leadership to support a wide range of critical business needs.

To learn more about IBM Software Services or to contact a Software Services sales specialist, visit

<http://www.ibm.com/software/sw-services/>

Ordering information

Charge metric

Program name	Part number or PID number	Charge metric
IBM i	5770-SS1	Per Processor and Per User
Additional IBM i Processors	5770-SSA	Per Processor
IBM i Application Server	5770-SSB	Per Processor
IBM i Users	5770-SSC	Per User

Per Processor Core Pricing

A *processor* (commonly called a CPU or core) is the unit of measure by which this program is licensed. It is a functional unit within a computing device that interprets and executes instructions. A processor consists of at least an instruction control unit and one or more arithmetic or logic unit. With multicore technology, each core is considered a processor. A Proof of Entitlement (PoE) must be obtained for the appropriate number of processors based on the level of all processor cores activated and available for use by the program on the server.

Concurrent User

Concurrent User is the unit of measure by which this program is licensed. A *Concurrent User* is a shared user access to the program within or outside of your enterprise. The program may be installed only on one computer or one server. The total number of Concurrent Users simultaneously accessing the program at any moment in time may not exceed the highest number of Concurrent Users authorized by the Proof of Entitlement (PoE). You must have an entitlement for each Concurrent User simultaneously accessing the program or any program component in any manner directly or indirectly (for example, via a multiplexing program, device, or application server) through any means.

IBM i5/OS (5722-SS1)

No-charge features

IBM i5/OS (5722-SS1)	Feature number
Publication features	
LID Doc for License Transfer	5900

Charge features

IBM i5/OS (5722-SS1)	Per Processor feature
Per Proc - To same or lowr grp	1788
Per Proc - Grp #1 to Grp #2	1790
Per Proc - Grp #1 to Grp #3	1789
Per Proc - Grp #2 to Grp #3	1791

IBM i (5761-SS1)

No-charge features

IBM i (5761-SS1)	Feature number
Publication Features	
LID Doc for License Transfer	5900

Charge features

IBM i (5761-SS1)	Per Processor feature
Per Processor Addl Lic - 70Y	1999
Per Processor Addl Lic - 71Y	2000
Per Proc -To same or lower grp	2004
Per Proc - Grp #1 to Grp #2	2003
Per Proc - Grp #1 to Grp #3	2006
Per Proc - Grp #2 to Grp #3	2002

IBM i Per Processor Billing (5761-SSA)

Charge features

IBM i Per Processor Billing (5761-SSA)	Per Processor feature
Addl Lic w/90 day SWMA - 70Y	1997
Addl Lic w/1 yr SWMA - 71Y	1998

IBM i Per User Billing (5761-SSC)

Charge features

IBM i Per User Billing (5761-SSC)	Per Usage feature
Per 10 Users - 70Y	1988
Per 10 Users Special - 70Y	1989
Unlimited Users - 70Y	1990
IBM i External Access - 70Y	1991
Unlimit Collab Users - 70Y	1992
Per 10 Users - 71Y	1993
Unlimited Users - 71Y	1994
IBM i External Access - 71Y	1995
Unlimit Collab Users - 71Y	1996

IBM i (5770-SS1)

Charge features

IBM i (5770-SS1)	Other features
Special Delivery features	
Expedite - Customer Expense	3446

No-charge features

IBM i 7.1 (5770-SS1)	Feature number
Special Delivery features	
Do Not Ship Pubs	3470
Do Not Ship Media	3471
Electronic Software Delivery	3450
Other features	
SW Key 1st MT Digit	4001
SW Key 2nd MT Digit	4002
SW Key 3rd MT Digit	4003
SW Key 4th MT Digit	4004
SW Key 1st CPU Digit	4005
SW Key 2nd CPU Digit	4006
SW Key 3rd CPU Digit	4007
SW Key 4th CPU Digit	4008
SW Key 5th CPU Digit	4009
SW Key 6th CPU Digit	4010
SW Key 7th CPU Digit	4011
Manufacturing features	
LPAR System Indicator	3441
IBM i Asset Registration	9001ePoE features
Per Proc ePoE Reg for IBM i PW	
ePoE Upg Reg - Base	6001
Key/ePoE Per 5 Users Reg	6100
Key/ePoE Per Appl Srv Reg	6200
Key/ePoE Unlim Users	6398
Key/ePoE Reg Ext Access Users	6399
Publication features	
AFP Font Collection	2680
ePOE Customer Notice	5899
LID doc for license transfer	5900
IBM i Access for Windows DVD	7010
Supply features	
i 7.1 Lang Grp 1 Supply	5817
i 7.1 Lang Grp 2 Supply	5818
i 7.1 Lang Grp 3 Supply	5819
i 7.1 Machine Code	5870

Charge features

IBM i (5770-SS1)	Flat Fee feature
OTC Stamped Media	1383
OTC Non-Stamped Media	1384
IBM i (5770-SS1)	Per Processor feature
Per Proc Upg 520-E4A 2-Core	1472
Per Proc Upg 525-E4A 2-Core	1473
Per Proc Upg M15-E4A 1-Core	1474
Per Proc Upg M25-E4A 2-Core	1475
Per Proc Upg from MMA-MMB	1485
Per Proc Upg App Srv MMA-MMB	1486
Per Proc Upg from MMA-MHB	1491
Per Proc Upg App Srv MMA-MHB	1492

Per Proc Upg from 550-E8A	1462
Per Proc Upg from M50-E8A	1463
Per Proc Upg Appl 550-E8A	1464
Per Proc Upg Appl M50-E8A	1465
Per Proc -To same or lower grp	1448
Per Proc - Grp #1 to Grp #2	1449
Per Proc - Grp #1 to Grp #3	1450
Per Proc - Grp #2 to Grp #3	1451
Per Proc Reg Add Li-E4A	1476
Per Proc Upg from 570-MMA	1514
Per Proc Upg App Srv 570-MMA	1515
Per Proc Upg from 570-FHA	1518
Per Proc Upg from 595-FHA	1517
Per Proc Upg App Srv 570-FHA	1520
Per Proc Upg App Srv 595-FHA	1519
Per Proc Chrg w/SW Pkg - MMB	1488
Per Proc Reg Addl Lic - 515	1452
Per Proc Chrg w/SW Pkg - E8B	1484
Per Proc Reg Addl Lic - 520	1453
Per Proc Chrg w/SW Pkg - MHB	1494
Per Proc Reg Addl Lic - 525	1454
Per Proc Reg Addl Lic - 60X	1470
Per Proc Reg Addl Lic - 550	1455
Per Proc Reg Addl Lic - 23X	1481
Per Proc Reg Addl Lic - 570	1456
Per Proc Reg Addl Lic - 595	1457
Per Proc Chrg w/SW Pkg - MMA	1459
Per Proc Reg Addl Lic - MMA	1458
Per Proc Reg Addl Lic - 61X	1471
Per Proc Reg Addl Lic - E8A	1466
Per Proc Reg Addl Lic - M15	1460
Per Proc Reg Addl Lic - M25	1461
Per Proc Reg Addl Lic - M50	1467
Per Proc Reg Addl Lic - E8B	1483
Per Proc Chg w/SW Pkg - FHA	1468
Per Proc Reg Addl Lic - FHA	1469
Per Proc Reg Addl Lic - MMB	1487
Per Proc Reg Addl Lic - MHB	1493
Per Proc Reg Addl Lic - E4S	1482
Per Proc Reg Addl Lic - 70Y	1489
Per Proc Reg Addl Lic - 71Y	1490
Per Proc Chrg/SW Pkg - EMA	1480
Per Proc Addl Lic - EMA	1479

No-charge features

	Feature number
Opticonnect (5770-SS1)	
ePoE features	
ePoE Upg Reg P05 - Opticonnect	6405
ePoE Upg Reg P10 - Opticonnect	6410
ePoE Upg Reg P20 - Opticonnect	6420
ePoE Upg Reg P30 - Opticonnect	6430
ePoE Upg Reg P40 - Opticonnect	6440
ePoE Upg Reg P50 - Opticonnect	6450
ePoE Upg Reg P60 - Opticonnect	6460
Supply features	
i 7.1 Opticonnect Supply	5912

Charge features

Opticonnect (5770-SS1) OTC features

P05 Opticonnect OTC	0156
P10 Opticonnect OTC	0157
P20 Opticonnect OTC	0158
P30 Opticonnect OTC	0159
P40 Opticonnect OTC	0160
P50 Opticonnect OTC	0161
P60 Opticonnect OTC	0162
P05 Upg Opticonnect 5761-SS1	0191
P10 Upg Opticonnect 5761-SS1	0192
P20 Upg Opticonnect 5761-SS1	0193
P30 Upg Opticonnect 5761-SS1	0194
P40 Upg Opticonnect 5761-SS1	0195
P50 Upg Opticonnect 5761-SS1	0196
P60 Upg Opticonnect 5761-SS1	0197
P05 Upg Opticonnect 5722-SS1	0149
P10 Upg Opticonnect 5722-SS1	0150
P20 Upg Opticonnect 5722-SS1	0151
P30 Upg Opticonnect 5722-SS1	0152
P40 Upg Opticonnect 5722-SS1	0153
P50 Upg Opticonnect 5722-SS1	0154
P60 Upg Opticonnect 5722-SS1	0155
P05 Upg Opticonnect 5769-SS1	0184
P10 Upg Opticonnect 5769-SS1	0185
P20 Upg Opticonnect 5769-SS1	0186
P30 Upg Opticonnect 5769-SS1	0187
P40 Upg Opticonnect 5769-SS1	0188
P50 Upg Opticonnect 5769-SS1	0189
P60 Upg Opticonnect 5769-SS1	0190

Opticonnect (5770-SS1) Group-to-Group Upgrades features

P05-P10 Upg Opticonnect	0163
P05-P20 Upg Opticonnect	0164
P05-P30 Upg Opticonnect	0165
P05-P40 Upg Opticonnect	0166
P05-P50 Upg Opticonnect	0167
P05-P60 Upg Opticonnect	0168
P10-P20 Upg Opticonnect	0169
P10-P30 Upg Opticonnect	0170
P10-P40 Upg Opticonnect	0171
P10-P50 Upg Opticonnect	0172
P10-P60 Upg Opticonnect	0173
P20-P30 Upg Opticonnect	0174
P20-P40 Upg Opticonnect	0175
P20-P50 Upg Opticonnect	0176
P20-P60 Upg Opticonnect	0177
P30-P40 Upg Opticonnect	0178
P30-P50 Upg Opticonnect	0179
P30-P60 Upg Opticonnect	0180
P40-P50 Upg Opticonnect	0181
P40-P60 Upg Opticonnect	0182
P50-P60 Upg Opticonnect	0183

No-charge features

Media and Storage Extensions (5770-SS1) Feature number

ePoE features

ePoE Upg Reg - M&S Extensions 6101

Supply features

i 7.1 M&S Extensions Supply 5911

Charge features

Media and Storage Extensions (5770-SS1) Per Server feature

Per Proc Chrg w/SW Pkg M&S Ext 0398

Per Processor M&S Ext 0396

Per Proc Upg M&S Ext 5761-SS1 1063

Per Proc Upg M&S Ext 5722-SS1 0394

Per Proc Upg M&S Ext 5769-SS1 0395

No-charge features

DB2 Multisystem (5770-SS1) Feature number

ePoE features

ePoe Upg Reg -DB2 Multi Sys 6501

Supply features

i 7.1 DB2 Multisystem Supply 5914

Charge features

DB2 Multisystem (5770-SS1)	Per Server feature
Per Server DB2 Multisystem	0495
Upg Per Srv DB2Multi 5769SS1	0494
Upg Per Srv DB2Multi 5722SS1	0493
Upg Per Srv DB2Multi 5761SS1	0496

No-charge features

PSF for IBM i 1-55 IPM Printer Support (5770-SS1)	Feature number
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ePoE features

ePoE Upg Reg User - PSF 1-55	6201
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Supply features

i 7.1 PSF/400 1-55 IPM Supply	5916
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Charge features

PSF for IBM i 1-55 IPM Printer Support (5770-SS1)	Per Server feature
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Per Server PSF 1-55 IPM	0491
Upg Per Serv PSF 1-55 5761SS1	0492
Upg Per Serv PSF 1-55 5722SS1	0489
Upg Per Serv PSF 1-55 5769SS1	0490

No-charge features

PSF for IBM i 1-100 IPM Printer Support (5770-SS1)	Feature number
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ePoE features

ePoE Upg Reg User - PSF 1-100	6301
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Supply features

i 7.1 PSF/400 1-100 IPM Supply	5917
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Charge features

PSF for IBM i 1-100 IPM Printer Support (5770-SS1)	Per Server feature
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Per Server PSF 1-100 IPM	0259
Per Srv V7 Upg from 1-55	0260
Upg Per Serv PSF 1-100 5761SS1	0261
Upg Per Serv PSF 1-100 5769SS1	0257
Upg Per Serv PSF 1-100 5722SS1	0258

No-charge features

PSF for IBM i AnySpeed Printer Support (5770-SS1) Feature number

ePoE features

ePoE Upg Reg - PSF Anyspeed 6401

Supply features

i 7.1 PSF/400 Any Speed Supply 5918

Charge features

PSF for IBM i AnySpeed Printer Support (5770-SS1) Per Server feature

Per Server OTC PSF Anyspeed 0445

Per Server V7 Upg from 1-100 0441

Per Srv V7 Upg from 1-55 0442

Upg Per Serv Anyspeed 5761SS1 0446

Upg Per Serv Anyspeed 5722SS1 0444

Upg Per Serv Anyspeed 5769SS1 0443

No-charge features

DB2 Symmetric Multiprocessing (5770-SS1) Feature number

ePoE features

ePoE Upg Reg P05 - DB2 SMP 6305

ePoE Upg Reg P10 - DB2 SMP 6310

ePoE Upg Reg P20 - DB2 SMP 6320

ePoE Upg Reg P30 - DB2 SMP 6330

ePoE Upg Reg P40 - DB2 SMP 6340

ePoE Upg Reg P50 - DB2 SMP 6350

ePoE Upg Reg P60 - DB2 SMP 6360

Supply features

i 7.1 DB2 Symm Multi Supply 5913

Charge features

DB2 Symmetric Multiprocessing (5770-SS1) OTC features

P05 PBOTC DB2 SMP 0215

P10 PBOTC DB2 SMP 0216

P20 PBOTC DB2 SMP 0218

P30 PBOTC DB2 SMP 0221

P40 PBOTC DB2 SMP 0225

P50 PBOTC DB2 SMP 0230

P60 PBOTC DB2 SMP 0236

P05 Upg DB2 SMP 5769-SS1 0201

P10 Upg DB2 SMP 5769-SS1 0202

P20 Upg DB2 SMP 5769-SS1 0203

P30 Upg DB2 SMP 5769-SS1 0204

P40 Upg DB2 SMP 5769-SS1 0205

P50 Upg DB2 SMP 5769-SS1 0206

P60 Upg DB2 SMP 5769-SS1 0207

P05 Upg DB2 SMP 5722-SS1 0208

P10 Upg DB2 SMP 5722-SS1 0209

P20 Upg DB2 SMP 5722-SS1 0210

P30 Upg DB2 SMP 5722-SS1 0211

P40 Upg DB2 SMP 5722-SS1	0212
P50 Upg DB2 SMP 5722-SS1	0213
P60 Upg DB2 SMP 5722-SS1	0214
P05 Upg DB2 SMP 5761-SS1	0791
P10 Upg DB2 SMP 5761-SS1	0792
P20 Upg DB2 SMP 5761-SS1	0793
P30 Upg DB2 SMP 5761-SS1	0794
P40 Upg DB2 SMP 5761-SS1	0795
P50 Upg DB2 SMP 5761-SS1	0796
P60 Upg DB2 SMP 5761-SS1	0797
P05 DB2 SMP Reg w/Pkg	0250
P10 DB2 SMP Reg w/Pkg	0251
P20 DB2 SMP Reg w/Pkg	0252
P30 DB2 SMP Reg w/Pkg	0253
P40 DB2 SMP Reg w/Pkg	0254
P50 DB2 SMP Reg w/Pkg	0255
P60 DB2 SMP Reg w/Pkg	0256

DB2 Symmetric Multiprocessing (5770-SS1) Group-to-Group Upgrades features

P05-P10 Upg DB2 SMP	0217
P05-P20 Upg DB2 SMP	0219
P05-P30 Upg DB2 SMP	0222
P05-P40 Upg DB2 SMP	0226
P05-P50 Upg DB2 SMP	0231
P05-P60 Upg DB2 SMP	0237
P10-P20 Upg DB2 SMP	0220
P10-P30 Upg DB2 SMP	0223
P10-P40 Upg DB2 SMP	0227
P10-P50 Upg DB2 SMP	0232
P10-P60 Upg DB2 SMP	0238
P20-P30 Upg DB2 SMP	0224
P20-P40 Upg DB2 SMP	0228
P20-P50 Upg DB2 SMP	0233
P20-P60 Upg DB2 SMP	0239
P30-P40 Upg DB2 SMP	0229
P30-P50 Upg DB2 SMP	0234
P30-P60 Upg DB2 SMP	0240
P40-P50 Upg DB2 SMP	0235
P40-P60 Upg DB2 SMP	0241
P50-P60 Upg DB2 SMP	0242

No-charge features

HA Switchable Resources (5770-SS1)	Feature number
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ePoE features

ePoE Upg Reg P05 - HA Switch	6105
ePoE Upg Reg P10 - HA Switch	6110
ePoE Upg Reg P20 - HA Switch	6120
ePoE Upg Reg P30 - HA Switch	6130
ePoE Upg Reg P40 - HA Switch	6140
ePoE Upg Reg P50 - HA Switch	6150
ePoE Upg Reg P60 - HA Switch	6160

Supply features

i 7.1 HA Switch Res Supply	5919
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Charge features

HA Switchable Resources (5770-SS1) OTC features

P05 HA Switch Res OTC	0461
P10 HA Switch Res OTC	0462
P20 HA Switch Res OTC	0463
P30 HA Switch Res OTC	0464
P40 HA Switch Res OTC	0465
P50 HA Switch Res OTC	0466
P60 HA Switch Res OTC	0467
P05 HA Switch Res w/SW Pkg	1064
P10 HA Switch Res w/SW Pkg	1065
P20 HA Switch Res w/SW Pkg	1066
P30 HA Switch Res w/SW Pkg	1067
P40 HA Switch Res w/SW Pkg	1068
P50 HA Switch Res w/SW Pkg	1069
P60 HA Switch Res w/SW Pkg	1070
P05 Upg HA Switch Res 5722-SS1	0447
P10 Upg HA Switch Res 5722-SS1	0448
P20 Upg HA Switch Res 5722-SS1	0449
P30 Upg HA Switch Res 5722-SS1	0450
P40 Upg HA Switch Res 5722-SS1	0451
P50 Upg HA Switch Res 5722-SS1	0452
P60 Upg HA Switch Res 5722-SS1	0453
P05 Upg HA Switch Res 5761-SS1	0454
P10 Upg HA Switch Res 5761-SS1	0455
P20 Upg HA Switch Res 5761-SS1	0456
P30 Upg HA Switch Res 5761-SS1	0457
P40 Upg HA Switch Res 5761-SS1	0458
P50 Upg HA Switch Res 5761-SS1	0459
P60 Upg HA Switch Res 5761-SS1	0460

HA Switchable Resources (5770-SS1) Group-to-Group Upgrades features

P05-P10 Upg HA Switchable Res	0468
P05-P20 Upg HA Switchable Res	0469
P05-P30 Upg HA Switchable Res	0470
P05-P40 Upg HA Switchable Res	0471
P05-P50 Upg HA Switchable Res	0472
P05-P60 Upg HA Switchable Res	0473
P10-P20 Upg HA Switchable Res	0474
P10-P30 Upg HA Switchable Res	0475
P10-P40 Upg HA Switchable Res	0476
P10-P50 Upg HA Switchable Res	0477
P10-P60 Upg HA Switchable Res	0478
P20-P30 Upg HA Switchable Res	0479
P20-P40 Upg HA Switchable Res	0480
P20-P50 Upg HA Switchable Res	0481
P20-P60 Upg HA Switchable Res	0482
P30-P40 Upg HA Switchable Res	0483
P30-P50 Upg HA Switchable Res	0484
P30-P60 Upg HA Switchable Res	0485
P40-P50 Upg HA Switchable Res	0486
P40-P60 Upg HA Switchable Res	0487
P50-P60 Upg HA Switchable Res	0488

No-charge features

HA Journal Performance (5770-SS1) Feature number

ePoE features

ePoE Upg Reg P05 - HA Journal	6205
ePoE Upg Reg P10 - HA Journal	6210
ePoE Upg Reg P20 - HA Journal	6220
ePoE Upg Reg P30 - HA Journal	6230
ePoE Upg Reg P40 - HA Journal	6240
ePoE Upg Reg P50 - HA Journal	6250
ePoE Upg Reg P60 - HA Journal	6260

Supply features

i 7.1 HA Journal Perf Supply	5910
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Charge features

HA Journal Performance (5770-SS1) OTC features

P05 HA Journal Perf OTC	0406
P10 HA Journal Perf OTC	0407
P20 HA Journal Perf OTC	0408
P30 HA Journal Perf OTC	0409
P40 HA Journal Perf OTC	0410
P50 HA Journal Perf OTC	0411
P60 HA Journal Perf OTC	0412
P05 Upg HA Jour 5722-SS1	0399
P10 Upg HA Jour 5722-SS1	0400
P20 Upg HA Jour 5722-SS1	0401
P30 Upg HA Jour 5722-SS1	0402
P40 Upg HA Jour 5722-SS1	0403
P50 Upg HA Jour 5722-SS1	0404
P60 Upg HA Jour 5722-SS1	0405
P05 Upg HA Jour 5761-SS1	0434
P10 Upg HA Jour 5761-SS1	0435
P20 Upg HA Jour 5761-SS1	0436
P30 Upg HA Jour 5761-SS1	0437
P40 Upg HA Jour 5761-SS1	0438
P50 Upg HA Jour 5761-SS1	0439
P60 Upg HA Jour 5761-SS1	0440

HA Journal Performance (5770-SS1) Group-to-Group Upgrades features

P05-P10 Upg HA Journal Perf	0413
P05-P20 Upg HA Journal Perf	0414
P05-P30 Upg HA Journal Perf	0415
P05-P40 Upg HA Journal Perf	0416
P05-P50 Upg HA Journal Perf	0417
P05-P60 Upg HA Journal Perf	0418
P10-P20 Upg HA Journal Perf	0419
P10-P30 Upg HA Journal Perf	0420
P10-P40 Upg HA Journal Perf	0421
P10-P50 Upg HA Journal Perf	0422
P10-P60 Upg HA Journal Perf	0423
P20-P30 Upg HA Journal Perf	0424
P20-P40 Upg HA Journal Perf	0425
P20-P50 Upg HA Journal Perf	0426
P20-P60 Upg HA Journal Perf	0427
P30-P40 Upg HA Journal Perf	0428
P30-P50 Upg HA Journal Perf	0429
P30-P60 Upg HA Journal Perf	0430
P40-P50 Upg HA Journal Perf	0431

P40-P60 Upg HA Journal Perf	0432
P50-P60 Upg HA Journal Perf	0433

No-charge features

Encrypted Backup Enablement (5770-SS1)	Feature number
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ePoE features

ePoE Upg Reg P05 - Encry Bkup	6505
ePoE Upg Reg P10 - Encry Bkup	6510
ePoE Upg Reg P20 - Encry Bkup	6520
ePoE Upg Reg P30 - Encry Bkup	6530
ePoE Upg Reg P40 - Encry Bkup	6540
ePoE Upg Reg P50 - Encry Bkup	6550
ePoE Upg Reg P05 - Encry Bkup	6560

Supply features

i 7.1 Encry Bckup Enab Supply	5915
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Charge features

Encrypted Backup Enablement (5770-SS1)	OTC features
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P05 Encry Bkup Enablement OTC	0324
P10 Encry Bkup Enablement OTC	0325
P20 Encry Bkup Enablement OTC	0326
P30 Encry Bkup Enablement OTC	0327
P40 Encry Bkup Enablement OTC	0328
P50 Encry Bkup Enablement OTC	0329
P60 Encry Bkup Enablement OTC	0330
P05 Upg Encry Bkup 5761-SS1	0352
P10 Upg Encry Bkup 5761-SS1	0353
P20 Upg Encry Bkup 5761-SS1	0354
P30 Upg Encry Bkup 5761-SS1	0355
P40 Upg Encry Bkup 5761-SS1	0356
P50 Upg Encry Bkup 5761-SS1	0357
P60 Upg Encry Bkup 5761-SS1	0358

Encrypted Backup Enablement (5770-SS1)	Group-to-Group Upgrades features
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P05-P10 Upg Encry Bkup Enable	0331
P05-P20 Upg Encry Bkup Enable	0332
P05-P30 Upg Encry Bkup Enable	0333
P05-P40 Upg Encry Bkup Enable	0334
P05-P50 Upg Encry Bkup Enable	0335
P05-P60 Upg Encry Bkup Enable	0336
P10-P20 Upg Encry Bkup Enable	0337
P10-P30 Upg Encry Bkup Enable	0338
P10-P40 Upg Encry Bkup Enable	0339
P10-P50 Upg Encry Bkup Enable	0340
P10-P60 Upg Encry Bkup Enable	0341
P20-P30 Upg Encry Bkup Enable	0342
P20-P40 Upg Encry Bkup Enable	0343
P20-P50 Upg Encry Bkup Enable	0344
P20-P60 Upg Encry Bkup Enable	0345
P30-P40 Upg Encry Bkup Enable	0346
P30-P50 Upg Encry Bkup Enable	0347
P30-P60 Upg Encry Bkup Enable	0348
P40-P50 Upg Encry Bkup Enable	0349
P40-P60 Upg Encry Bkup Enable	0350
P50-P60 Upg Encry Bkup Enable	0351

No-charge features

Encrypted ASP Enablement (5770-SS1)	Feature number
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ePoE features

ePoE Upg Reg P05 - Encry ASP	6605
ePoE Upg Reg P10 - Encry ASP	6610
ePoE Upg Reg P20 - Encry ASP	6620
ePoE Upg Reg P30 - Encry ASP	6630
ePoE Upg Reg P40 - Encry ASP	6640
ePoE Upg Reg P50 - Encry ASP	6650
ePoE Upg Reg P30 - Encry ASP	6660

Supply features

i 7.1 Encry ASP Enable Supply	5920
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Charge features

Encrypted ASP Enablement (5770-SS1)	OTC features
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P05 Encry ASP Enablement OTC	0359
P10 Encry ASP Enablement OTC	0360
P20 Encry ASP Enablement OTC	0361
P30 Encry ASP Enablement OTC	0362
P40 Encry ASP Enablement OTC	0363
P50 Encry ASP Enablement OTC	0364
P60 Encry ASP Enablement OTC	0365
P05 Upg Encry ASP 5761-SS1	0387
P10 Upg Encry ASP 5761-SS1	0388
P20 Upg Encry ASP 5761-SS1	0389
P30 Upg Encry ASP 5761-SS1	0390
P40 Upg Encry ASP 5761-SS1	0391
P50 Upg Encry ASP 5761-SS1	0392
P60 Upg Encry ASP 5761-SS1	0393

Encrypted ASP Enablement (5770-SS1)	Group-to-Group Upgrades features
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P05-P10 Upg Encry ASP Enable	0366
P05-P20 Upg Encry ASP Enable	0367
P05-P30 Upg Encry ASP Enable	0368
P05-P40 Upg Encry ASP Enable	0369
P05-P50 Upg Encry ASP Enable	0370
P05-P60 Upg Encry ASP Enable	0371
P10-P20 Upg Encry ASP Enable	0372
P10-P30 Upg Encry ASP Enable	0373
P10-P40 Upg Encry ASP Enable	0374
P10-P50 Upg Encry ASP Enable	0375
P10-P60 Upg Encry ASP Enable	0376
P20-P30 Upg Encry ASP Enable	0377
P20-P40 Upg Encry ASP Enable	0378
P20-P50 Upg Encry ASP Enable	0379
P20-P60 Upg Encry ASP Enable	0380
P30-P40 Upg Encry ASP Enable	0381
P30-P50 Upg Encry ASP Enable	0382
P30-P60 Upg Encry ASP Enable	0383
P40-P50 Upg Encry ASP Enable	0384
P40-P60 Upg Encry ASP Enable	0385
P50-P60 Upg Encry ASP Enable	0386

IBM i Per Processor Billing (5770-SSA)

Charge features

IBM i Per Processor Billing (5770-SSA)	Per Processor feature
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Addl Lic w/1yr SWMA - 515	1001
Addl Lic w/1yr SWMA - 520	1002
Addl Lic w/1yr SWMA - 550	1004
Addl Lic w/1yr SWMA - 570	1005
Addl Lic w/1yr SWMA - 595	1006
Addl Lic w/1yr SWMA - MMA	1007
Addl Lic w/1yr SWMA - 61x	1013
Addl Lic w/90 days SWMA - M15	1008
Addl Lic w/1yr SWMA - M25	1009
Addl Lic w/1yr SWMA - M50	1010
Addl Lic w/1yr SWMA - FHA	1011
Addl Lic w/90 days SWMA - 60X	1012
Addl Lic w/90 day - E4A 1-Core	1014
Addl Lic w/1Yr SWMA E4A 2-Core	1015
Addl Lic w/1Yr SWMA E4A 4-Core	1016
Addl Lic w/1yr SWMA - E8A	1017
Addl Lic w/1yr SWMA - EMA	1018
Addl Lic w/1Yr SWMA - 23X	1019
Addl Lic w/1yr SWMA - E8B	1037
Addl Lic w1yr SWMA - MMB	1038
Addl Lic w/1yr SWMA - MHB	1039
Addl Lic w/90 days SWMA - 70Y	1031
Addl Lic w/1yr SWMA - 71Y	1033
Addl Lic w/1yr SWMA - 525	1003

IBM i Per Processor Billing (5770-SSA)	Per Usage feature
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Addl Lic w/1Yr - E4S 2-Core	1021
Addl Lic w/1Yr - E4S 4-Core	1023

IBM i Application Server (5770-SSB)

Charge features

IBM i Application Server (5770-SSB)	Per Processor feature
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Appl Srv Lic w/1Yr SWMA - 550	1041
Appl Srv Lic w/1Yr SWMA - 570	1042
Appl Srv Lic w/1Yr SWMA - 595	1043
Appl Srv Lic w/1Yr SWMA - MMA	1044
Appl Srv Lic w/1Yr SWMA - E8B	1050
Appl Srv Lic w/1Yr SWMA - M50	1045
Appl Srv Lic w/1Yr SWMA - FHA	1046
Appl Srv Lic w/1Yr SWMA - E8A	1047
Appl Srv Lic w/1Yr SWMA - EMA	1048
Appl Srv Lic w/1yr SWMA - MMB	1052
Appl Srv Lic w/1yr SWMA - MHB	1054

IBM i Per User Billing (5770-SSC)

Charge features

IBM i Per User Billing (5770-SSC)	Per Usage feature
Unlimited Users - 515	1387
Per 5 Users - 515	1385
IBM i External Access - 515	1389
Per 10 Users Special - 60X	1402
Per 10 Users - 525	1386
Unlimited Collab Users - 525	1392
Unlimited Users - 525	1388
IBM i External Access - 525	1390
Per 10 Users - 70Y	1439
Per 10 Users Special - 70Y	1440
Unlimited Users - 70Y	1441
Unlimited Collab Users - M15	1399
IBM i External Access - 70Y	1442
Per 10 Users - 61X	1406
Unlimited Users - 61X	1407
IBM i External Access - 61X	1408
Unlimited Collab Users - 61X	1409
Unlim Collab Users - 70Y	1443
Per 5 Users - M15	1393
Unlimited Users - M15	1395
Per 10 Users - 71Y	1444
IBM i External Access - M15	1397
Unlimited Collab Users - 515	1391
Unlimited Users - 71Y	1445
Per 10 Users - M25	1394
IBM i External Access - 71Y	1446
Unlim Collab Users - 71Y	1447
Unlimited Users - M25	1396
IBM i External Access - M25	1398
Unlimited Collab Users - M25	1400
Per 10 Users - 60X	1401
Unlimited Users - 60X	1403
IBM i External Access - 60X	1404
Unlimited Collab Users - 60X	1405
Per 5 Users 0-price E4A 1-Core	1415
Per 5 Users E4A 1-Core	1414
Unlimited Users E4A 1-Core	1416
i External Access - E4A 1-Core	1417
Unlim Collab Users E4A 1-Core	1418
Per 10 Users 0-pr E4A 2/4-Core	1425
Per 10 Users - E4A 2/4-Core	1423
Per 10 Users CBU -E4A 2/4-Core	1424
Unlimited Users - E4A 2-Core	1419
Unlimited Users - E4A 4-Core	1421
Un Users CBU/Upg -E4A 2-Core	1420
Un Users CBU/Upg -E4A 4-Core	1422
i External Acc - E4A 2/4-Core	1426
Un Collab Users E4A 2/4-Core	1427
Per 10 Users - 23X	1410
Unlimited Users - 23X	1411
IBM i External Access - 23X	1412
Unlimited Collab Users - 23X	1413
Per 5 Users - 0-pr E4S 1-Core	1429
Per 5 Users - E4S 1-Core	1428
Unlimited Users - E4S 1-Core	1430
i External Access - E4S 1-Core	1431
Unlim Coll Users E4S 1-Core	1432
Per 10 Users 0-pr E4S 2/4-Core	1436
Per 10 Users - E4S 2/4-Core	1435
Unlimited Users - E4S 2-Core	1433
Unlimited Users - E4S 4-Core	1434
i Ext Access - E4S 2/4-Core	1437
Un Collab Users E4S 2/4-Core	1438

This software license includes Software Maintenance, previously referred to as Software Subscription and Technical Support.

Extending coverage for a total of three years from the date of acquisition may be elected. Order the program number, feature number, and quantity to extend coverage for your software licenses. If maintenance has expired, specify the after license feature number.

Software license includes

5770-SS1 - IBM i 1-year Software Maintenance

5733-SPP - Maintenance no charge 1-year registration + 1-year renewal

5733-SP3 - Maintenance 3-year registration (2-year uplift)

5733-SP3 - Maintenance 3-year renewal

5733-MAL - Software Maintenance After License,
1-year Software Maintenance After License

5733-MAL - Software Maintenance After License, 3-year

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<http://www.ibm.com/servers/eservers/ess>

Customers should generally select electronic delivery when ordering via ESU, but do have the ability to select physical delivery. Programs ordered for ESD will have the same download images provided as on the CD / DVD media shipped for physical orders. Countries requiring physical delivery of License Information documentation will have these documents shipped separately. This physical shipment will not delay the immediate availability of the ESD images for customer download.

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Customers choosing physical delivery will also have the electronic images available for ESD download.

ESD help (instructions on how to use):

http://www.ibm.com/systems/support/software/delivery/en_US/downloadinfo.htm

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<https://www.ibm.com/servers/eserver/ess/OpenServlet.wss>

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5722-SS1 IBM i V5 Operating System
5761-SS1 IBM i V6 Operating System
5770-SS1 IBM i V7 Operating System

5722-NLV IBM i V5 National Languages for i
5761-NLV IBM i V6 National Languages for i
5770-NLV IBM i V7 National Languages for i

5692-A5L AIX V5 System Program Order
5692-A6P AIX V6 System Program Order
5692-LOP Linux on Power System Program Order

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No

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System i Software Maintenance applies

Yes

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No

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Prices

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IBM i5/OS (5722-SS1)

Charge features

IBM i5/OS (5722-SS1)	Per Processor feature
Per Proc - To same or lower grp	1788
Per Proc - Grp #1 to Grp #3	1789
Per Proc - Grp #1 to Grp #2	1790
Per Proc - Grp #2 to Grp #3	1791

IBM i (5761-SS1)

Charge features

IBM i (5761-SS1)	Per Processor feature
Per Processor Addl Lic - 70Y	1999
Per Processor Addl Lic - 71Y	2000
Per Proc - Grp #2 to Grp #3	2002
Per Proc - Grp #1 to Grp #2	2003
Per Proc -To same or lower grp	2004
Per Proc - Grp #1 to Grp #3	2006

IBM i Per Processor Billing (5761-SSA)

Charge features

IBM i Per Processor Billing (5761-SSA)	Per Processor feature
Addl Lic w/90 day SWMA - 70Y	1997
Addl Lic w/1 yr SWMA - 71Y	1998

IBM i Per User Billing (5761-SSC)

Charge features

IBM i Per User Billing (5761-SSC)	Per Usage feature
Per 10 Users - 70Y	1988
Per 10 Users Special - 70Y	1989
Unlimited Users - 70Y	1990
IBM i External Access - 70Y	1991
Unlimit Collab Users - 70Y	1992
Per 10 Users - 71Y	1993
Unlimited Users - 71Y	1994
IBM i External Access - 71Y	1995
Unlimit Collab Users - 71Y	1996

IBM i (5770-SS1)

Charge features

IBM i (5770-SS1)	Other feature
Special Delivery featuresExpedite - Customer Expense	3446

Charge features

IBM i 7.1 (5770-SS1)	Flat Fee feature
OTC Stamped Media	1383
OTC Non-Stamped Media	1384
IBM i (5770-SS1)	Per Processor feature
Per Proc -To same or lower grp	1448
Per Proc - Grp #1 to Grp #2	1449
Per Proc - Grp #1 to Grp #3	1450
Per Proc - Grp #2 to Grp #3	1451
Per Proc Reg Addl Lic - 515	1452
Per Proc Reg Addl Lic - 520	1453
Per Proc Reg Addl Lic - 525	1454
Per Proc Reg Addl Lic - 550	1455
Per Proc Reg Addl Lic - 570	1456
Per Proc Reg Addl Lic - 595	1457
Per Proc Reg Addl Lic - MMA	1458
Per Proc Chrg w/SW Pkg - MMA	1459
Per Proc Reg Addl Lic - M15	1460
Per Proc Reg Addl Lic - M25	1461
Per Proc Upg from 550-E8A	1462
Per Proc Upg from M50-E8A	1463
Per Proc Upg Appl 550-E8A	1464
Per Proc Upg Appl M50-E8A	1465
Per Proc Reg Addl Lic - E8A	1466

Per Proc Reg Addl Lic - M50	1467
Per Proc Chg w/SW Pkg - FHA	1468
Per Proc Reg Addl Lic - FHA	1469
Per Proc Reg Addl Lic - 60X	1470
Per Proc Reg Addl Lic - 61X	1471
Per Proc Upg 520-E4A 2-Core	1472
Per Proc Upg 525-E4A 2-Core	1473
Per Proc Upg M15-E4A 1-Core	1474
Per Proc Upg M25-E4A 2-Core	1475
Per Proc Reg Add Li-E4A	1476
Per Proc Addl Lic - EMA	1479
Per Proc Chrg/SW Pkg - EMA	1480
Per Proc Reg Addl Lic - 23X	1481
Per Proc Reg Addl Lic - E4S	1482
Per Proc Reg Addl Lic - E8B	1483
Per Proc Chrg w/SW Pkg - E8B	1484
Per Proc Upg from MMA-MMB	1485
Per Proc Upg App Srv MMA-MMB	1486
Per Proc Reg Addl Lic - MMB	1487
Per Proc Chrg w/SW Pkg - MMB	1488
Per Proc Reg Addl Lic - 70Y	1489
Per Proc Reg Addl Lic - 71Y	1490
Per Proc Upg from MMA-MHB	1491
Per Proc Upg App Srv MMA-MHB	1492
Per Proc Reg Addl Lic - MHB	1493
Per Proc Chrg w/SW Pkg - MHB	1494
Per Proc Upg from 570-MMA	1514
Per Proc Upg App Srv 570-MMA	1515
Per Proc Upg from 595-FHA	1517
Per Proc Upg from 570-FHA	1518
Per Proc Upg App Srv 595-FHA	1519
Per Proc Upg App Srv 570-FHA	1520

Charge features

Opticonnect (5770-SS1) OTC
feature

P05 Opticonnect OTC	0156
P10 Opticonnect OTC	0157
P20 Opticonnect OTC	0158
P30 Opticonnect OTC	0159
P40 Opticonnect OTC	0160
P50 Opticonnect OTC	0161
P60 Opticonnect OTC	0162
P05 Upg Opticonnect 5761-SS1	0191
P10 Upg Opticonnect 5761-SS1	0192
P20 Upg Opticonnect 5761-SS1	0193
P30 Upg Opticonnect 5761-SS1	0194
P40 Upg Opticonnect 5761-SS1	0195
P50 Upg Opticonnect 5761-SS1	0196
P60 Upg Opticonnect 5761-SS1	0197
P05 Upg Opticonnect 5722-SS1	0149
P10 Upg Opticonnect 5722-SS1	0150
P20 Upg Opticonnect 5722-SS1	0151
P30 Upg Opticonnect 5722-SS1	0152
P40 Upg Opticonnect 5722-SS1	0153
P50 Upg Opticonnect 5722-SS1	0154
P60 Upg Opticonnect 5722-SS1	0155
P05 Upg Opticonnect 5769-SS1	0184
P10 Upg Opticonnect 5769-SS1	0185
P20 Upg Opticonnect 5769-SS1	0186
P30 Upg Opticonnect 5769-SS1	0187
P40 Upg Opticonnect 5769-SS1	0188
P50 Upg Opticonnect 5769-SS1	0189
P60 Upg Opticonnect 5769-SS1	0190

Opticonnect (5770-SS1) Group-to-Group Upgrades
feature Grp

P05-P10 Upg Opticonnect	0163
P05-P20 Upg Opticonnect	0164
P05-P30 Upg Opticonnect	0165
P05-P40 Upg Opticonnect	0166
P05-P50 Upg Opticonnect	0167
P05-P60 Upg Opticonnect	0168
P10-P20 Upg Opticonnect	0169
P10-P30 Upg Opticonnect	0170
P10-P40 Upg Opticonnect	0171
P10-P50 Upg Opticonnect	0172
P10-P60 Upg Opticonnect	0173
P20-P30 Upg Opticonnect	0174
P20-P40 Upg Opticonnect	0175
P20-P50 Upg Opticonnect	0176
P20-P60 Upg Opticonnect	0177
P30-P40 Upg Opticonnect	0178
P30-P50 Upg Opticonnect	0179
P30-P60 Upg Opticonnect	0180
P40-P50 Upg Opticonnect	0181
P40-P60 Upg Opticonnect	0182
P50-P60 Upg Opticonnect	0183

Charge features

Media and Storage Extensions Per Server
(5770-SS1) feature

Per Proc Upg M&S Ext 5722-SS1	0394
Per Proc Upg M&S Ext 5769-SS1	0395
Per Processor M&S Ext	0396
Per Proc Chrg w/SW Pkg M&S Ext	0398
Per Proc Upg M&S Ext 5761-SS1	1063

Charge features

DB2 Multisystem (5770-SS1) Per Server
feature

Upg Per Srv DB2Multi 5722SS1	0493
Upg Per Srv DB2Multi 5769SS1	0494
Per Server DB2 Multisystem	0495
Upg Per Srv DB2Multi 5761SS1	0496

Charge features

PSF for IBM i 1-55 IPM Per Server
Printer Support (5770-SS1) feature

Upg Per Serv PSF 1-55 5722SS1	0489
Upg Per Serv PSF 1-55 5769SS1	0490
Per Server PSF 1-55 IPM	0491
Upg Per Serv PSF 1-55 5761SS1	0492

Charge features

PSF for IBM i 1-100 IPM PerServer
Printer Support (5770-SS1) feature

Upg Per Serv PSF 1-100 5769SS1	0257
Upg Per Serv PSF 1-100 5722SS1	0258
Per Server PSF 1-100 IPM	0259
Per Srv V7 Upg from 1-55	0260
Upg Per Serv PSF 1-100 5761SS1	0261

Charge features

PSF for IBM i AnySpeed Per Server
Printer Support (5770-SS1) feature

Per Server V7 Upg from 1-100 0441
Per Srv V7 Upg from 1-55 0442
Upg Per Serv Anyspeed 5769SS1 0443
Upg Per Serv Anyspeed 5722SS1 0444
Per Server OTC PSF Anyspeed 0445
Upg Per Serv Anyspeed 5761SS1 0446

Charge features

DB2 Symmetric Multiprocessing OTC
(5770-SS1) feature

P05 PBOTC DB2 SMP 0215
P10 PBOTC DB2 SMP 0216
P20 PBOTC DB2 SMP 0218
P30 PBOTC DB2 SMP 0221
P40 PBOTC DB2 SMP 0225
P50 PBOTC DB2 SMP 0230
P60 PBOTC DB2 SMP 0236
P05 Upg DB2 SMP 5769-SS1 0201
P10 Upg DB2 SMP 5769-SS1 0202
P20 Upg DB2 SMP 5769-SS1 0203
P30 Upg DB2 SMP 5769-SS1 0204
P40 Upg DB2 SMP 5769-SS1 0205
P50 Upg DB2 SMP 5769-SS1 0206
P60 Upg DB2 SMP 5769-SS1 0207
P05 Upg DB2 SMP 5722-SS1 0208
P10 Upg DB2 SMP 5722-SS1 0209
P20 Upg DB2 SMP 5722-SS1 0210
P30 Upg DB2 SMP 5722-SS1 0211
P40 Upg DB2 SMP 5722-SS1 0212
P50 Upg DB2 SMP 5722-SS1 0213
P60 Upg DB2 SMP 5722-SS1 0214
P05 Upg DB2 SMP 5761-SS1 0791
P10 Upg DB2 SMP 5761-SS1 0792
P20 Upg DB2 SMP 5761-SS1 0793
P30 Upg DB2 SMP 5761-SS1 0794
P40 Upg DB2 SMP 5761-SS1 0795
P50 Upg DB2 SMP 5761-SS1 0796
P60 Upg DB2 SMP 5761-SS1 0797
P05 DB2 SMP Reg w/Pkg 0250
P10 DB2 SMP Reg w/Pkg 0251
P20 DB2 SMP Reg w/Pkg 0252
P30 DB2 SMP Reg w/Pkg 0253
P40 DB2 SMP Reg w/Pkg 0254
P50 DB2 SMP Reg w/Pkg 0255
P60 DB2 SMP Reg w/Pkg 0256

DB2 Symmetric Multiprocessing Group-to-Group Upgrades
(5770-SS1) feature Grp

P05-P10 Upg DB2 SMP 0217
P05-P20 Upg DB2 SMP 0219
P05-P30 Upg DB2 SMP 0222
P05-P40 Upg DB2 SMP 0226
P05-P50 Upg DB2 SMP 0231
P05-P60 Upg DB2 SMP 0237
P10-P20 Upg DB2 SMP 0220
P10-P30 Upg DB2 SMP 0223
P10-P40 Upg DB2 SMP 0227
P10-P50 Upg DB2 SMP 0232
P10-P60 Upg DB2 SMP 0238
P20-P30 Upg DB2 SMP 0224
P20-P40 Upg DB2 SMP 0228

P20-P50 Upg DB2 SMP	0233
P20-P60 Upg DB2 SMP	0239
P30-P40 Upg DB2 SMP	0229
P30-P50 Upg DB2 SMP	0234
P30-P60 Upg DB2 SMP	0240
P40-P50 Upg DB2 SMP	0235
P40-P60 Upg DB2 SMP	0241
P50-P60 Upg DB2 SMP	0242

Charge features

HA Switchable Resources (5770-SS1)	OTC feature
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P05 HA Switch Res OTC	0461
P10 HA Switch Res OTC	0462
P20 HA Switch Res OTC	0463
P30 HA Switch Res OTC	0464
P40 HA Switch Res OTC	0465
P50 HA Switch Res OTC	0466
P60 HA Switch Res OTC	0467
P05 HA Switch Res w/SW Pkg	1064
P10 HA Switch Res w/SW Pkg	1065
P20 HA Switch Res w/SW Pkg	1066
P30 HA Switch Res w/SW Pkg	1067
P40 HA Switch Res w/SW Pkg	1068
P50 HA Switch Res w/SW Pkg	1069
P60 HA Switch Res w/SW Pkg	1070
P05 Upg HA Switch Res 5722-SS1	0447
P10 Upg HA Switch Res 5722-SS1	0448
P20 Upg HA Switch Res 5722-SS1	0449
P30 Upg HA Switch Res 5722-SS1	0450
P40 Upg HA Switch Res 5722-SS1	0451
P50 Upg HA Switch Res 5722-SS1	0452
P60 Upg HA Switch Res 5722-SS1	0453
P05 Upg HA Switch Res 5761-SS1	0454
P10 Upg HA Switch Res 5761-SS1	0455
P20 Upg HA Switch Res 5761-SS1	0456
P30 Upg HA Switch Res 5761-SS1	0457
P40 Upg HA Switch Res 5761-SS1	0458
P50 Upg HA Switch Res 5761-SS1	0459
P60 Upg HA Switch Res 5761-SS1	0460

HA Switchable Resources (5770-SS1)	Group-to-Group Upgrades feature	Grp
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P05-P10 Upg HA Switchable Res	0468
P05-P20 Upg HA Switchable Res	0469
P05-P30 Upg HA Switchable Res	0470
P05-P40 Upg HA Switchable Res	0471
P05-P50 Upg HA Switchable Res	0472
P05-P60 Upg HA Switchable Res	0473
P10-P20 Upg HA Switchable Res	0474
P10-P30 Upg HA Switchable Res	0475
P10-P40 Upg HA Switchable Res	0476
P10-P50 Upg HA Switchable Res	0477
P10-P60 Upg HA Switchable Res	0478
P20-P30 Upg HA Switchable Res	0479
P20-P40 Upg HA Switchable Res	0480
P20-P50 Upg HA Switchable Res	0481
P20-P60 Upg HA Switchable Res	0482
P30-P40 Upg HA Switchable Res	0483
P30-P50 Upg HA Switchable Res	0484
P30-P60 Upg HA Switchable Res	0485
P40-P50 Upg HA Switchable Res	0486
P40-P60 Upg HA Switchable Res	0487
P50-P60 Upg HA Switchable Res	0488

Charge features

HA Journal Performance
(5770-SS1) OTC
feature

P05 HA Journal Perf OTC	0406
P10 HA Journal Perf OTC	0407
P20 HA Journal Perf OTC	0408
P30 HA Journal Perf OTC	0409
P40 HA Journal Perf OTC	0410
P50 HA Journal Perf OTC	0411
P60 HA Journal Perf OTC	0412
P05 Upg HA Jour 5722-SS1	0399
P10 Upg HA Jour 5722-SS1	0400
P20 Upg HA Jour 5722-SS1	0401
P30 Upg HA Jour 5722-SS1	0402
P40 Upg HA Jour 5722-SS1	0403
P50 Upg HA Jour 5722-SS1	0404
P60 Upg HA Jour 5722-SS1	0405
P05 Upg HA Jour 5761-SS1	0434
P10 Upg HA Jour 5761-SS1	0435
P20 Upg HA Jour 5761-SS1	0436
P30 Upg HA Jour 5761-SS1	0437
P40 Upg HA Jour 5761-SS1	0438
P50 Upg HA Jour 5761-SS1	0439
P60 Upg HA Jour 5761-SS1	0440

HA Journal Performance
(5770-SS1) Group-to-Group Upgrades
feature Grp

P05-P10 Upg HA Journal Perf	0413
P05-P20 Upg HA Journal Perf	0414
P05-P30 Upg HA Journal Perf	0415
P05-P40 Upg HA Journal Perf	0416
P05-P50 Upg HA Journal Perf	0417
P05-P60 Upg HA Journal Perf	0418
P10-P20 Upg HA Journal Perf	0419
P10-P30 Upg HA Journal Perf	0420
P10-P40 Upg HA Journal Perf	0421
P10-P50 Upg HA Journal Perf	0422
P10-P60 Upg HA Journal Perf	0423
P20-P30 Upg HA Journal Perf	0424
P20-P40 Upg HA Journal Perf	0425
P20-P50 Upg HA Journal Perf	0426
P20-P60 Upg HA Journal Perf	0427
P30-P40 Upg HA Journal Perf	0428
P30-P50 Upg HA Journal Perf	0429
P30-P60 Upg HA Journal Perf	0430
P40-P50 Upg HA Journal Perf	0431
P40-P60 Upg HA Journal Perf	0432
P50-P60 Upg HA Journal Perf	0433

Charge features

Encrypted Backup Enablement
(5770-SS1) OTC
feature

P05 Encry Bkup Enablement OTC	0324
P10 Encry Bkup Enablement OTC	0325
P20 Encry Bkup Enablement OTC	0326
P30 Encry Bkup Enablement OTC	0327
P40 Encry Bkup Enablement OTC	0328
P50 Encry Bkup Enablement OTC	0329
P60 Encry Bkup Enablement OTC	0330
P05 Upg Encry Bkup 5761-SS1	0352
P10 Upg Encry Bkup 5761-SS1	0353
P20 Upg Encry Bkup 5761-SS1	0354
P30 Upg Encry Bkup 5761-SS1	0355
P40 Upg Encry Bkup 5761-SS1	0356
P50 Upg Encry Bkup 5761-SS1	0357
P60 Upg Encry Bkup 5761-SS1	0358

Encrypted Backup Enablement (5770-SS1)	Group-to-Group Upgrades feature	Grp
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P05-P10 Upg Encry Bkup Enable	0331
P05-P20 Upg Encry Bkup Enable	0332
P05-P30 Upg Encry Bkup Enable	0333
P05-P40 Upg Encry Bkup Enable	0334
P05-P50 Upg Encry Bkup Enable	0335
P05-P60 Upg Encry Bkup Enable	0336
P10-P20 Upg Encry Bkup Enable	0337
P10-P30 Upg Encry Bkup Enable	0338
P10-P40 Upg Encry Bkup Enable	0339
P10-P50 Upg Encry Bkup Enable	0340
P10-P60 Upg Encry Bkup Enable	0341
P20-P30 Upg Encry Bkup Enable	0342
P20-P40 Upg Encry Bkup Enable	0343
P20-P50 Upg Encry Bkup Enable	0344
P20-P60 Upg Encry Bkup Enable	0345
P30-P40 Upg Encry Bkup Enable	0346
P30-P50 Upg Encry Bkup Enable	0347
P30-P60 Upg Encry Bkup Enable	0348
P40-P50 Upg Encry Bkup Enable	0349
P40-P60 Upg Encry Bkup Enable	0350
P50-P60 Upg Encry Bkup Enable	0351

Charge features

Encrypted ASP Enablement (5770-SS1)	OTC feature
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P05 Encry ASP Enablement OTC	0359
P10 Encry ASP Enablement OTC	0360
P20 Encry ASP Enablement OTC	0361
P30 Encry ASP Enablement OTC	0362
P40 Encry ASP Enablement OTC	0363
P50 Encry ASP Enablement OTC	0364
P60 Encry ASP Enablement OTC	0365
P05 Upg Encry ASP 5761-SS1	0387
P10 Upg Encry ASP 5761-SS1	0388
P20 Upg Encry ASP 5761-SS1	0389
P30 Upg Encry ASP 5761-SS1	0390
P40 Upg Encry ASP 5761-SS1	0391
P50 Upg Encry ASP 5761-SS1	0392
P60 Upg Encry ASP 5761-SS1	0393

Encrypted ASP Enablement (5770-SS1)	Group-to-Group Upgrades feature	Grp
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P05-P10 Upg Encry ASP Enable	0366
P05-P20 Upg Encry ASP Enable	0367
P05-P30 Upg Encry ASP Enable	0368
P05-P40 Upg Encry ASP Enable	0369
P05-P50 Upg Encry ASP Enable	0370
P05-P60 Upg Encry ASP Enable	0371
P10-P20 Upg Encry ASP Enable	0372
P10-P30 Upg Encry ASP Enable	0373
P10-P40 Upg Encry ASP Enable	0374
P10-P50 Upg Encry ASP Enable	0375
P10-P60 Upg Encry ASP Enable	0376
P20-P30 Upg Encry ASP Enable	0377
P20-P40 Upg Encry ASP Enable	0378
P20-P50 Upg Encry ASP Enable	0379
P20-P60 Upg Encry ASP Enable	0380
P30-P40 Upg Encry ASP Enable	0381
P30-P50 Upg Encry ASP Enable	0382
P30-P60 Upg Encry ASP Enable	0383
P40-P50 Upg Encry ASP Enable	0384
P40-P60 Upg Encry ASP Enable	0385
P50-P60 Upg Encry ASP Enable	0386

IBM i Per Processor Billing (5770-SSA)

Charge features

IBM i Per Processor Billing (5770-SSA)	Per Processor feature
Addl Lic w/1yr SWMA - 515	1001
Addl Lic w/1yr SWMA - 520	1002
Addl Lic w/1yr SWMA - 525	1003
Addl Lic w/1yr SWMA - 550	1004
Addl Lic w/1yr SWMA - 570	1005
Addl Lic w/1yr SWMA - 595	1006
Addl Lic w/1yr SWMA - MMA	1007
Addl Lic w/90 days SWMA - M15	1008
Addl Lic w/1yr SWMA - M25	1009
Addl Lic w/1yr SWMA - M50	1010
Addl Lic w/1yr SWMA - FHA	1011
Addl Lic w/90 days SWMA - 60X	1012
Addl Lic w/1yr SWMA - 61x	1013
Addl Lic w/90 day - E4A 1-Core	1014
Addl Lic w/1Yr SWMA E4A 2-Core	1015
Addl Lic w/1Yr SWMA E4A 4-Core	1016
Addl Lic w/1yr SWMA - E8A	1017
Addl Lic w/1yr SWMA - EMA	1018
Addl Lic w/1Yr SWMA - 23X	1019
Addl Lic w/90 days SWMA - 70Y	1031
Addl Lic w/1yr SWMA - 71Y	1033
Addl Lic w/1yr SWMA - E8B	1037
Addl Lic w1yr SWMA - MMB	1038
Addl Lic w/1yr SWMA - MHB	1039
IBM i Per Processor Billing (5770-SSA)	Per Usage feature

Addl Lic w/1Yr - E4S 2-Core	1021
Addl Lic w/1Yr - E4S 4-Core	1023

IBM i Application Server (5770-SSB)

Charge features

IBM i Application Server (5770-SSB)	Per Processor feature
Appl Srv Lic w/1Yr SWMA - 550	1041
Appl Srv Lic w/1Yr SWMA - 570	1042
Appl Srv Lic w/1Yr SWMA - 595	1043
Appl Srv Lic w/1Yr SWMA - MMA	1044
Appl Srv Lic w/1Yr SWMA - M50	1045
Appl Srv Lic w/1Yr SWMA - FHA	1046
Appl Srv Lic w/1Yr SWMA - E8A	1047
Appl Srv Lic w/1Yr SWMA - EMA	1048
Appl Srv Lic w/1Yr SWMA - E8B	1050
Appl Srv Lic w/1yr SWMA - MMB	1052
Appl Srv Lic w/1yr SWMA - MHB	1054

IBM i Per User Billing (5770-SSC)

Charge features

IBM i Per User Billing (5770-SSC)	Per Usage feature
Per 5 Users - 515	1385
Per 10 Users - 525	1386
Unlimited Users - 515	1387
Unlimited Users - 525	1388
IBM i External Access - 515	1389
IBM i External Access - 525	1390
Unlimited Collab Users - 515	1391
Unlimited Collab Users - 525	1392
Per 5 Users - M15	1393
Per 10 Users - M25	1394
Unlimited Users - M15	1395
Unlimited Users - M25	1396
IBM i External Access - M15	1397
IBM i External Access - M25	1398
Unlimited Collab Users - M15	1399
Unlimited Collab Users - M25	1400
Per 10 Users - 60X	1401
Per 10 Users Special - 60X	1402
Unlimited Users - 60X	1403
IBM i External Access - 60X	1404
Unlimited Collab Users - 60X	1405
Per 10 Users - 61X	1406
Unlimited Users - 61X	1407
IBM i External Access - 61X	1408
Unlimited Collab Users - 61X	1409
Per 10 Users - 23X	1410
Unlimited Users - 23X	1411
IBM i External Access - 23X	1412
Unlimited Collab Users - 23X	1413
Per 5 Users E4A 1-Core	1414
Per 5 Users 0-price E4A 1-Core	1415
Unlimited Users E4A 1-Core	1416
i External Access - E4A 1-Core	1417
Unlim Collab Users E4A 1-Core	1418
Unlimited Users - E4A 2-Core	1419
Un Users CBU/Upg -E4A 2-Core	1420
Unlimited Users - E4A 4-Core	1421
Un Users CBU/Upg -E4A 4-Core	1422
Per 10 Users - E4A 2/4-Core	1423
Per 10 Users CBU -E4A 2/4-Core	1424
Per 10 Users 0-pr E4A 2/4-Core	1425
i External Acc - E4A 2/4-Core	1426
Un Collab Users E4A 2/4-Core	1427
Per 5 Users - E4S 1-Core	1428
Per 5 Users - 0-pr E4S 1-Core	1429
Unlimited Users - E4S 1-Core	1430
i External Access - E4S 1-Core	1431
Unlim Coll Users E4S 1-Core	1432
Unlimited Users - E4S 2-Core	1433
Unlimited Users - E4S 4-Core	1434
Per 10 Users - E4S 2/4-Core	1435
Per 10 Users 0-pr E4S 2/4-Core	1436
i Ext Access - E4S 2/4-Core	1437
Un Collab Users E4S 2/4-Core	1438
Per 10 Users - 70Y	1439
Per 10 Users Special - 70Y	1440
Unlimited Users - 70Y	1441
IBM i External Access - 70Y	1442
Unlim Collab Users - 70Y	1443
Per 10 Users - 71Y	1444
Unlimited Users - 71Y	1445
IBM i External Access - 71Y	1446
Unlim Collab Users - 71Y	1447

Product ID	Feature number	Description	One-time charge
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5722SS1	1788	Per Proc - To same or lowr gr	\$5,000
5722SS1	1789	Per Proc - Grp #1 to Grp #3	\$18,000
5722SS1	1790	Per Proc - Grp #1 to Grp #2	\$18,000
5722SS1	1791	Per Proc - Grp #2 to Grp #3	\$5,000
5761SS1	1999	Per Processor Addl Lic - 70Y	\$0
5761SS1	2000	Per Processor Addl Lic - 71Y	\$0
5761SS1	2002	Per Proc - Grp #2 to Grp #3	\$5,000
5761SS1	2003	Per Proc - Grp #1 to Grp #2	\$18,000
5761SS1	2004	Per Proc -To same or lower gr	\$5,000
5761SS1	2006	Per Proc - Grp #1 to Grp #3	\$18,000
5761SSA	1997	Addl Lic w/90 day SWMA - 70Y	\$2,245
5761SSA	1998	Addl Lic w/1 yr SWMA - 71Y	\$14,995
5761SSC	1988	Per 10 Users - 70Y	\$2,500
5761SSC	1989	Per 10 Users Special - 70Y	\$1,250
5761SSC	1990	Unlimited Users - 70Y	\$18,750
5761SSC	1991	IBM i External Access - 70Y	\$3,995
5761SSC	1992	Unlimit Collab Users - 70Y	\$3,995
5761SSC	1993	Per 10 Users - 71Y	\$2,500
5761SSC	1994	Unlimited Users - 71Y	\$50,000
5761SSC	1995	IBM i External Access - 71Y	\$3,995
5761SSC	1996	Unlimit Collab Users - 71Y	\$5,995
5770SS1	3446	Expedite - Customer Expense	\$30
5770SS1	1383	OTC Stamped Media	\$50
5770SS1	1384	OTC Non-Stamped Media	\$50
5770SS1	1448	Per Proc -To same or lower gr	\$5,000
5770SS1	1449	Per Proc - Grp #1 to Grp #2	\$18,000
5770SS1	1450	Per Proc - Grp #1 to Grp #3	\$18,000
5770SS1	1451	Per Proc - Grp #2 to Grp #3	\$5,000
5770SS1	1452	Per Proc Reg Addl Lic - 515	\$0
5770SS1	1453	Per Proc Reg Addl Lic - 520	\$0
5770SS1	1454	Per Proc Reg Addl Lic - 525	\$0
5770SS1	1455	Per Proc Reg Addl Lic - 550	\$0
5770SS1	1456	Per Proc Reg Addl Lic - 570	\$0
5770SS1	1457	Per Proc Reg Addl Lic - 595	\$0

5770SS1	1458	Per Proc Reg Addl Lic - MMA	\$0
5770SS1	1459	Per Proc Chrg w/SW Pkg - MMA	\$0
5770SS1	1460	Per Proc Reg Addl Lic - M15	\$0
5770SS1	1461	Per Proc Reg Addl Lic - M25	\$0
5770SS1	1462	Per Proc Upg from 550-E8A	\$0
5770SS1	1463	Per Proc Upg from M50-E8A	\$0
5770SS1	1464	Per Proc Upg Appl 550-E8A	\$0
5770SS1	1465	Per Proc Upg Appl M50-E8A	\$0
5770SS1	1466	Per Proc Reg Addl Lic - E8A	\$0
5770SS1	1467	Per Proc Reg Addl Lic - M50	\$0
5770SS1	1468	Per Proc Chg w/SW Pkg - FHA	\$0
5770SS1	1469	Per Proc Reg Addl Lic - FHA	\$0
5770SS1	1470	Per Proc Reg Addl Lic - 60X	\$0
5770SS1	1471	Per Proc Reg Addl Lic - 61X	\$0
5770SS1	1472	Per Proc Upg 520- E4A 2-Core	\$0
5770SS1	1473	Per Proc Upg 525- E4A 2-Core	\$0
5770SS1	1474	Per Proc Upg M15- E4A 1-Core	\$0
5770SS1	1475	Per Proc Upg M25- E4A 2-Core	\$0
5770SS1	1522	Per Proc Reg Add Li-E4A	\$0
5770SS1	1479	Per Proc Addl Lic - EMA	\$0
5770SS1	1480	Per Proc Chrg/SW Pkg - EMA	\$0
5770SS1	1481	Per Proc Reg Addl Lic - 23X	\$0
5770SS1	1482	Per Proc Reg Addl Lic - E4S	\$0
5770SS1	1483	Per Proc Reg Addl Lic - E8B	\$0
5770SS1	1484	Per Proc Chrg w/SW Pkg - E8B	\$0
5770SS1	1485	Per Proc Upg from MMA-MMB	\$0
5770SS1	1486	Per Proc Upg App Srv MMA-MMB	\$0
5770SS1	1487	Per Proc Reg Addl Lic - MMB	\$0
5770SS1	1488	Per Proc Chrg w/SW Pkg - MMB	\$0
5770SS1	1489	Per Proc Reg Addl Lic - 70Y	\$0
5770SS1	1490	Per Proc Reg Addl Lic - 71Y	\$0
5770SS1	1491	Per Proc Upg from MMA-MHB	\$0
5770SS1	1492	Per Proc Upg App Srv MMA-MHB	\$0

5770SS1	1493	Per Proc Reg Addl Lic - MHB	\$0
5770SS1	1494	Per Proc Chrg w/SW Pkg - MHB	\$0
5770SS1	1514	Per Proc Upg from 570-MMA	\$0
5770SS1	1515	Per Proc Upg App Srv 570-MMA	\$0
5770SS1	1517	Per Proc Upg from 595-FHA	\$0
5770SS1	1518	Per Proc Upg from 570-FHA	\$0
5770SS1	1519	Per Proc Upg App Srv 595-FHA	\$0
5770SS1	1520	Per Proc Upg App Srv 570-FHA	\$0
5770SS1	0156	P05 Opticonnect OTC	\$420
5770SS1	0157	P10 Opticonnect OTC	\$840
5770SS1	0158	P20 Opticonnect OTC	\$2,520
5770SS1	0159	P30 Opticonnect OTC	\$5,040
5770SS1	0160	P40 Opticonnect OTC	\$7,560
5770SS1	0161	P50 Opticonnect OTC	\$10,080
5770SS1	0162	P60 Opticonnect OTC	\$12,600
5770SS1	0191	P05 Upg Opticonnect 5761- SS1	\$0
5770SS1	0192	P10 Upg Opticonnect 5761- SS1	\$0
5770SS1	0193	P20 Upg Opticonnect 5761- SS1	\$0
5770SS1	0194	P30 Upg Opticonnect 5761- SS1	\$0
5770SS1	0195	P40 Upg Opticonnect 5761- SS1	\$0
5770SS1	0196	P50 Upg Opticonnect 5761- SS1	\$0
5770SS1	0197	P60 Upg Opticonnect 5761- SS1	\$0
5770SS1	0149	P05 Upg Opticonnect 5722- SS1	\$0
5770SS1	0150	P10 Upg Opticonnect 5722- SS1	\$0
5770SS1	0151	P20 Upg Opticonnect 5722- SS1	\$0
5770SS1	0152	P30 Upg Opticonnect 5722- SS1	\$0
5770SS1	0153	P40 Upg Opticonnect 5722- SS1	\$0

5770SS1	0154	P50 Upg Opticonnect 5722- SS1	\$0
5770SS1	0155	P60 Upg Opticonnect 5722- SS1	\$0
5770SS1	0184	P05 Upg Opticonnect 5769- SS1	\$0
5770SS1	0185	P10 Upg Opticonnect 5769- SS1	\$0
5770SS1	0186	P20 Upg Opticonnect 5769- SS1	\$0
5770SS1	0187	P30 Upg Opticonnect 5769- SS1	\$0
5770SS1	0188	P40 Upg Opticonnect 5769- SS1	\$0
5770SS1	0189	P50 Upg Opticonnect 5769- SS1	\$0
5770SS1	0190	P60 Upg Opticonnect 5769- SS1	\$0
5770SS1	0163	P05-P10 Upg Opticonnect	\$420
5770SS1	0164	P05-P20 Upg Opticonnect	\$2,100
5770SS1	0165	P05-P30 Upg Opticonnect	\$4,620
5770SS1	0166	P05-P40 Upg Opticonnect	\$7,140
5770SS1	0167	P05-P50 Upg Opticonnect	\$9,660
5770SS1	0168	P05-P60 Upg Opticonnect	\$12,180
5770SS1	0169	P10-P20 Upg Opticonnect	\$1,680
5770SS1	0170	P10-P30 Upg Opticonnect	\$4,200
5770SS1	0171	P10-P40 Upg Opticonnect	\$6,720
5770SS1	0172	P10-P50 Upg Opticonnect	\$9,240
5770SS1	0173	P10-P60 Upg Opticonnect	\$11,760
5770SS1	0174	P20-P30 Upg Opticonnect	\$2,520
5770SS1	0175	P20-P40 Upg Opticonnect	\$5,040
5770SS1	0176	P20-P50 Upg Opticonnect	\$7,560
5770SS1	0177	P20-P60 Upg Opticonnect	\$10,080
5770SS1	0178	P30-P40 Upg Opticonnect	\$2,520
5770SS1	0179	P30-P50 Upg Opticonnect	\$5,040
5770SS1	0180	P30-P60 Upg Opticonnect	\$7,560
5770SS1	0181	P40-P50 Upg Opticonnect	\$2,520
5770SS1	0182	P40-P60 Upg Opticonnect	\$5,040

5770SS1	0183	P50-P60 Upg Opticonnect	\$2,520
5770SS1	0394	Per Proc Upg MS Ext 5722-SS1	\$0
5770SS1	0395	Per Proc Upg MS Ext 5769-SS1	\$0
5770SS1	0396	Per Processor MS Ext	\$995
5770SS1	0398	Per Proc Chrg w/SW Pkg MS Ex	\$0
5770SS1	1063	Per Proc Upg MS Ext 5761-SS1	\$0
5770SS1	0493	Upg Per Srv DB2Multi 5722SS1	\$0
5770SS1	0494	Upg Per Srv DB2Multi 5769SS1	\$0
5770SS1	0495	Per Server DB2 Multisystem	\$25,000
5770SS1	0496	Upg Per Srv DB2Multi 5761SS1	\$0
5770SS1	0489	Upg Per Serv PSF 1-55 5722SS1	\$0
5770SS1	0490	Upg Per Serv PSF 1-55 5769SS1	\$0
5770SS1	0491	Per Server PSF 1-55 IPM	\$2,495
5770SS1	0492	Upg Per Serv PSF 1-55 5761SS1	\$0
5770SS1	0257	Upg Per Serv PSF 1-100 5769SS	\$0
5770SS1	0258	Upg Per Serv PSF 1-100 5722SS	\$0
5770SS1	0259	Per Server PSF 1-100 IPM	\$4,500
5770SS1	0260	Per Srv V7 Upg from 1-55	\$2,005
5770SS1	0261	Upg Per Serv PSF 1-100 5761SS	\$0
5770SS1	0441	Per Server V7 Upg from 1-100	\$2,495
5770SS1	0442	Per Srv V7 Upg from 1-55	\$4,500
5770SS1	0443	Upg Per Serv Anyspeed 5769SS1	\$0
5770SS1	0444	Upg Per Serv Anyspeed 5722SS1	\$0
5770SS1	0445	Per Server OTC PSF Anyspeed	\$6,995
5770SS1	0446	Upg Per Serv Anyspeed 5761SS1	\$0
5770SS1	0215	P05 PBOTC DB2 SMP	\$1,000
5770SS1	0216	P10 PBOTC DB2 SMP	\$2,000
5770SS1	0218	P20 PBOTC DB2 SMP	\$6,000
5770SS1	0221	P30 PBOTC DB2 SMP	\$12,000
5770SS1	0225	P40 PBOTC DB2 SMP	\$18,000
5770SS1	0230	P50 PBOTC DB2 SMP	\$24,000
5770SS1	0236	P60 PBOTC DB2 SMP	\$30,000
5770SS1	0201	P05 Upg DB2 SMP 5769-SS1	\$0

5770SS1	0202	P10 Upg DB2 SMP 5769-SS1	\$0
5770SS1	0203	P20 Upg DB2 SMP 5769-SS1	\$0
5770SS1	0204	P30 Upg DB2 SMP 5769-SS1	\$0
5770SS1	0205	P40 Upg DB2 SMP 5769-SS1	\$0
5770SS1	0206	P50 Upg DB2 SMP 5769-SS1	\$0
5770SS1	0207	P60 Upg DB2 SMP 5769-SS1	\$0
5770SS1	0208	P05 Upg DB2 SMP 5722-SS1	\$0
5770SS1	0209	P10 Upg DB2 SMP 5722-SS1	\$0
5770SS1	0210	P20 Upg DB2 SMP 5722-SS1	\$0
5770SS1	0211	P30 Upg DB2 SMP 5722-SS1	\$0
5770SS1	0212	P40 Upg DB2 SMP 5722-SS1	\$0
5770SS1	0213	P50 Upg DB2 SMP 5722-SS1	\$0
5770SS1	0214	P60 Upg DB2 SMP 5722-SS1	\$0
5770SS1	0791	P05 Upg DB2 SMP 5761-SS1	\$0
5770SS1	0792	P10 Upg DB2 SMP 5761-SS1	\$0
5770SS1	0793	P20 Upg DB2 SMP 5761-SS1	\$0
5770SS1	0794	P30 Upg DB2 SMP 5761-SS1	\$0
5770SS1	0795	P40 Upg DB2 SMP 5761-SS1	\$0
5770SS1	0796	P50 Upg DB2 SMP 5761-SS1	\$0
5770SS1	0797	P60 Upg DB2 SMP 5761-SS1	\$0
5770SS1	0250	P05 DB2 SMP Reg w/Pkg	\$0
5770SS1	0251	P10 DB2 SMP Reg w/Pkg	\$0
5770SS1	0252	P20 DB2 SMP Reg w/Pkg	\$0
5770SS1	0253	P30 DB2 SMP Reg w/Pkg	\$0
5770SS1	0254	P40 DB2 SMP Reg w/Pkg	\$0
5770SS1	0255	P50 DB2 SMP Reg w/Pkg	\$0
5770SS1	0256	P60 DB2 SMP Reg w/Pkg	\$0
5770SS1	0217	P05-P10 Upg DB2 SMP	\$1,000
5770SS1	0219	P05-P20 Upg DB2 SMP	\$5,000
5770SS1	0222	P05-P30 Upg DB2 SMP	\$11,000
5770SS1	0226	P05-P40 Upg DB2 SMP	\$17,000
5770SS1	0231	P05-P50 Upg DB2 SMP	\$23,000
5770SS1	0237	P05-P60 Upg DB2 SMP	\$29,000

5770SS1	0220	P10-P20 Upg DB2 SMP	\$4,000
5770SS1	0223	P10-P30 Upg DB2 SMP	\$10,000
5770SS1	0227	P10-P40 Upg DB2 SMP	\$16,000
5770SS1	0232	P10-P50 Upg DB2 SMP	\$22,000
5770SS1	0238	P10-P60 Upg DB2 SMP	\$28,000
5770SS1	0224	P20-P30 Upg DB2 SMP	\$6,000
5770SS1	0228	P20-P40 Upg DB2 SMP	\$12,000
5770SS1	0233	P20-P50 Upg DB2 SMP	\$18,000
5770SS1	0239	P20-P60 Upg DB2 SMP	\$24,000
5770SS1	0229	P30-P40 Upg DB2 SMP	\$6,000
5770SS1	0234	P30-P50 Upg DB2 SMP	\$12,000
5770SS1	0240	P30-P60 Upg DB2 SMP	\$18,000
5770SS1	0235	P40-P50 Upg DB2 SMP	\$6,000
5770SS1	0241	P40-P60 Upg DB2 SMP	\$12,000
5770SS1	0242	P50-P60 Upg DB2 SMP	\$6,000
5770SS1	0461	P05 HA Switch Res OTC	\$2,085
5770SS1	0462	P10 HA Switch Res OTC	\$4,170
5770SS1	0463	P20 HA Switch Res OTC	\$12,500
5770SS1	0464	P30 HA Switch Res OTC	\$25,000
5770SS1	0465	P40 HA Switch Res OTC	\$37,500
5770SS1	0466	P50 HA Switch Res OTC	\$50,000
5770SS1	0467	P60 HA Switch Res OTC	\$62,500
5770SS1	1064	P05 HA Switch Res w/SW Pkg	\$0
5770SS1	1065	P10 HA Switch Res w/SW Pkg	\$0
5770SS1	1066	P20 HA Switch Res w/SW Pkg	\$0
5770SS1	1067	P30 HA Switch Res w/SW Pkg	\$0
5770SS1	1068	P40 HA Switch Res w/SW Pkg	\$0
5770SS1	1069	P50 HA Switch Res w/SW Pkg	\$0
5770SS1	1070	P60 HA Switch Res w/SW Pkg	\$0
5770SS1	0447	P05 Upg HA Switch Res 5722-SS	\$0
5770SS1	0448	P10 Upg HA Switch Res 5722-SS	\$0
5770SS1	0449	P20 Upg HA Switch Res 5722-SS	\$0
5770SS1	0450	P30 Upg HA Switch Res 5722-SS	\$0

5770SS1	0451	P40 Upg HA Switch Res 5722-SS	\$0
5770SS1	0452	P50 Upg HA Switch Res 5722-SS	\$0
5770SS1	0453	P60 Upg HA Switch Res 5722-SS	\$0
5770SS1	0454	P05 Upg HA Switch Res 5761-SS	\$0
5770SS1	0455	P10 Upg HA Switch Res 5761-SS	\$0
5770SS1	0456	P20 Upg HA Switch Res 5761-SS	\$0
5770SS1	0457	P30 Upg HA Switch Res 5761-SS	\$0
5770SS1	0458	P40 Upg HA Switch Res 5761-SS	\$0
5770SS1	0459	P50 Upg HA Switch Res 5761-SS	\$0
5770SS1	0460	P60 Upg HA Switch Res 5761-SS	\$0
5770SS1	0468	P05-P10 Upg HA Switchable Res	\$2,085
5770SS1	0469	P05-P20 Upg HA Switchable Res	\$10,415
5770SS1	0470	P05-P30 Upg HA Switchable Res	\$22,915
5770SS1	0471	P05-P40 Upg HA Switchable Res	\$35,415
5770SS1	0472	P05-P50 Upg HA Switchable Res	\$47,915
5770SS1	0473	P05-P60 Upg HA Switchable Res	\$60,415
5770SS1	0474	P10-P20 Upg HA Switchable Res	\$8,330
5770SS1	0475	P10-P30 Upg HA Switchable Res	\$20,830
5770SS1	0476	P10-P40 Upg HA Switchable Res	\$33,330
5770SS1	0477	P10-P50 Upg HA Switchable Res	\$45,830
5770SS1	0478	P10-P60 Upg HA Switchable Res	\$58,330
5770SS1	0479	P20-P30 Upg HA Switchable Res	\$12,500
5770SS1	0480	P20-P40 Upg HA Switchable Res	\$25,000
5770SS1	0481	P20-P50 Upg HA Switchable Res	\$37,500
5770SS1	0482	P20-P60 Upg HA Switchable Res	\$50,000
5770SS1	0483	P30-P40 Upg HA Switchable Res	\$12,500
5770SS1	0484	P30-P50 Upg HA Switchable Res	\$25,000
5770SS1	0485	P30-P60 Upg HA Switchable Res	\$37,500
5770SS1	0486	P40-P50 Upg HA Switchable Res	\$12,500
5770SS1	0487	P40-P60 Upg HA Switchable Res	\$25,000
5770SS1	0488	P50-P60 Upg HA Switchable Res	\$12,500
5770SS1	0406	P05 HA Journal Perf OTC	\$500
5770SS1	0407	P10 HA Journal Perf OTC	\$1,000

5770SS1	0408	P20 HA Journal Perf OTC	\$3,000
5770SS1	0409	P30 HA Journal Perf OTC	\$6,000
5770SS1	0410	P40 HA Journal Perf OTC	\$9,000
5770SS1	0411	P50 HA Journal Perf OTC	\$12,000
5770SS1	0412	P60 HA Journal Perf OTC	\$15,000
5770SS1	0399	P05 Upg HA Jour 5722-SS1	\$0
5770SS1	0400	P10 Upg HA Jour 5722-SS1	\$0
5770SS1	0401	P20 Upg HA Jour 5722-SS1	\$0
5770SS1	0402	P30 Upg HA Jour 5722-SS1	\$0
5770SS1	0403	P40 Upg HA Jour 5722-SS1	\$0
5770SS1	0404	P50 Upg HA Jour 5722-SS1	\$0
5770SS1	0405	P60 Upg HA Jour 5722-SS1	\$0
5770SS1	0434	P05 Upg HA Jour 5761-SS1	\$0
5770SS1	0435	P10 Upg HA Jour 5761-SS1	\$0
5770SS1	0436	P20 Upg HA Jour 5761-SS1	\$0
5770SS1	0437	P30 Upg HA Jour 5761-SS1	\$0
5770SS1	0438	P40 Upg HA Jour 5761-SS1	\$0
5770SS1	0439	P50 Upg HA Jour 5761-SS1	\$0
5770SS1	0440	P60 Upg HA Jour 5761-SS1	\$0
5770SS1	0413	P05-P10 Upg HA Journal Perf	\$500
5770SS1	0414	P05-P20 Upg HA Journal Perf	\$2,500
5770SS1	0415	P05-P30 Upg HA Journal Perf	\$5,500
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5770SS1	0433	P50-P60 Upg HA Journal Perf	\$3,000
5770SS1	0324	P05 Encry Bkup Enablement OTC	\$1,000
5770SS1	0325	P10 Encry Bkup Enablement OTC	\$2,000
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5770SS1	0328	P40 Encry Bkup Enablement OTC	\$18,000
5770SS1	0329	P50 Encry Bkup Enablement OTC	\$24,000
5770SS1	0330	P60 Encry Bkup Enablement OTC	\$30,000
5770SS1	0352	P05 Upg Encry Bkup 5761-SS1	\$0
5770SS1	0353	P10 Upg Encry Bkup 5761-SS1	\$0
5770SS1	0354	P20 Upg Encry Bkup 5761-SS1	\$0
5770SS1	0355	P30 Upg Encry Bkup 5761-SS1	\$0
5770SS1	0356	P40 Upg Encry Bkup 5761-SS1	\$0
5770SS1	0357	P50 Upg Encry Bkup 5761-SS1	\$0
5770SS1	0358	P60 Upg Encry Bkup 5761-SS1	\$0
5770SS1	0331	P05-P10 Upg Encry Bkup Enable	\$1,000
5770SS1	0332	P05-P20 Upg Encry Bkup Enable	\$5,000
5770SS1	0333	P05-P30 Upg Encry Bkup Enable	\$11,000
5770SS1	0334	P05-P40 Upg Encry Bkup Enable	\$17,000
5770SS1	0335	P05-P50 Upg Encry Bkup Enable	\$23,000
5770SS1	0336	P05-P60 Upg Encry Bkup Enable	\$29,000
5770SS1	0337	P10-P20 Upg Encry Bkup Enable	\$4,000
5770SS1	0338	P10-P30 Upg Encry Bkup Enable	\$10,000
5770SS1	0339	P10-P40 Upg Encry Bkup Enable	\$16,000
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5770SS1	0341	P10-P60 Upg Encry Bkup Enable	\$28,000
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5770SS1	0344	P20-P50 Upg Encry Bkup Enable	\$18,000
5770SS1	0345	P20-P60 Upg Encry Bkup Enable	\$24,000
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5770SS1	0347	P30-P50 Upg Encry Bkup Enable	\$12,000
5770SS1	0348	P30-P60 Upg Encry Bkup Enable	\$18,000
5770SS1	0349	P40-P50 Upg Encry Bkup Enable	\$6,000
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5770SS1	0359	P05 Encry ASP Enablement OTC	\$1,000
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5770SS1	0363	P40 Encry ASP Enablement OTC	\$18,000
5770SS1	0364	P50 Encry ASP Enablement OTC	\$24,000
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5770SS1	0387	P05 Upg Encry ASP 5761-SS1	\$0
5770SS1	0388	P10 Upg Encry ASP 5761-SS1	\$0
5770SS1	0389	P20 Upg Encry ASP 5761-SS1	\$0
5770SS1	0390	P30 Upg Encry ASP 5761-SS1	\$0
5770SS1	0391	P40 Upg Encry ASP 5761-SS1	\$0
5770SS1	0392	P50 Upg Encry ASP 5761-SS1	\$0
5770SS1	0393	P60 Upg Encry ASP 5761-SS1	\$0
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5770SS1	0383	P30-P60 Upg Encry ASP Enable	\$18,000
5770SS1	0384	P40-P50 Upg Encry ASP Enable	\$6,000
5770SS1	0385	P40-P60 Upg Encry ASP Enable	\$12,000
5770SS1	0386	P50-P60 Upg Encry ASP Enable	\$6,000
5770SSA	1001	Addl Lic w/1yr SWMA - 515	\$2,995
5770SSA	1002	Addl Lic w/1yr SWMA - 520	\$25,000
5770SSA	1003	Addl Lic w/1yr SWMA - 525	\$8,995
5770SSA	1004	Addl Lic w/1yr SWMA - 550	\$44,000
5770SSA	1005	Addl Lic w/1yr SWMA - 570	\$59,000
5770SSA	1006	Addl Lic w/1yr SWMA - 595	\$59,000
5770SSA	1007	Addl Lic w/1yr SWMA - MMA	\$59,000
5770SSA	1008	Addl Lic w/90 days SWMA - M15	\$2,245
5770SSA	1009	Addl Lic w/1yr SWMA - M25	\$14,995
5770SSA	1010	Addl Lic w/1yr SWMA - M50	\$44,000
5770SSA	1011	Addl Lic w/1yr SWMA - FHA	\$59,000
5770SSA	1012	Addl Lic w/90 days SWMA - 60X	\$2,245
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5770SSA	1017	Addl Lic w/1yr SWMA - E8A	\$44,000
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5770SSA	1021	Addl Lic w/1Yr - E4S 2-Core	\$14,995
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5770SSB	1041	Appl Srv Lic w/1Yr SWMA - 550	\$9,000
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5770SSB	1043	Appl Srv Lic w/1Yr SWMA - 595	\$9,000
5770SSB	1044	Appl Srv Lic w/1Yr SWMA - MMA	\$9,000
5770SSB	1045	Appl Srv Lic w/1Yr SWMA - M50	\$9,000
5770SSB	1046	Appl Srv Lic w/1Yr SWMA - FHA	\$9,000
5770SSB	1047	Appl Srv Lic w/1Yr SWMA - E8A	\$9,000
5770SSB	1048	Appl Srv Lic w/1Yr SWMA - EMA	\$9,000
5770SSB	1050	Appl Srv Lic w/1Yr SWMA - E8B	\$9,000
5770SSB	1052	Appl Srv Lic w/1yr SWMA - MMB	\$9,000
5770SSB	1054	Appl Srv Lic w/1yr SWMA - MHB	\$9,000
5770SSC	1385	Per 5 Users - 515	\$1,250
5770SSC	1386	Per 10 Users - 525	\$2,500
5770SSC	1387	Unlimited Users - 515	\$18,750
5770SSC	1388	Unlimited Users - 525	\$50,000
5770SSC	1389	IBM i External Access - 515	\$3,995
5770SSC	1390	IBM i External Access - 525	\$3,995
5770SSC	1391	Unlimited Collab Users - 515	\$3,995
5770SSC	1392	Unlimited Collab Users - 525	\$5,995
5770SSC	1393	Per 5 Users - M15	\$1,250
5770SSC	1394	Per 10 Users - M25	\$2,500
5770SSC	1395	Unlimited Users - M15	\$18,750
5770SSC	1396	Unlimited Users - M25	\$50,000
5770SSC	1397	IBM i External Access - M15	\$3,995
5770SSC	1398	IBM i External Access - M25	\$3,995
5770SSC	1399	Unlimited Collab Users - M15	\$3,995
5770SSC	1400	Unlimited Collab Users - M25	\$5,995
5770SSC	1401	Per 10 Users - 60X	\$2,500
5770SSC	1402	Per 10 Users Special - 60	\$1,250
5770SSC	1403	Unlimited Users - 60X	\$18,750
5770SSC	1404	IBM i External Access - 60X	\$3,995

5770SSC	1405	Unlimited Collab Users - 60X	\$3,995
5770SSC	1406	Per 10 Users - 61X	\$2,500
5770SSC	1407	Unlimited Users - 61X	\$50,000
5770SSC	1408	IBM i External Access - 61X	\$3,995
5770SSC	1409	Unlimited Collab Users - 61X	\$5,995
5770SSC	1410	Per 10 Users - 23X	\$2,500
5770SSC	1411	Unlimited Users - 23X	\$50,000
5770SSC	1412	IBM i External Access - 23X	\$3,995
5770SSC	1413	Unlimited Collab Users - 23X	\$5,995
5770SSC	1414	Per 5 Users E4A 1-Core	\$1,250
5770SSC	1415	Per 5 Users 0-price E4A 1-Core	\$0
5770SSC	1416	Unlimited Users E4A 1-Core	\$18,750
5770SSC	1417	i External Access - E4A 1-Core	\$3,995
5770SSC	1418	Unlim Collab Users E4A 1-Core	\$3,995
5770SSC	1419	Unlimited Users - E4A 2-Core	\$50,000
5770SSC	1420	Un Users CBU/Upg - E4A 2-Core	\$20,000
5770SSC	1421	Unlimited Users - E4A 4-Core	\$75,000
5770SSC	1422	Un Users CBU/Upg - E4A 4-Core	\$30,000
5770SSC	1423	Per 10 Users - E4A 2/4-Core	\$2,500
5770SSC	1424	Per 10 Users CBU - E4A 2/4-Core	\$1,250
5770SSC	1425	Per 10 Users 0-pr E4A 2/4-Core	\$0
5770SSC	1426	i External Acc - E4A 2/4-Core	\$3,995
5770SSC	1427	Un Collab Users E4A 2/4-Core	\$5,995
5770SSC	1428	Per 5 Users - E4S 1-Core	\$1,250
5770SSC	1429	Per 5 Users - 0-pr E4S 1-Core	\$0
5770SSC	1430	Unlimited Users - E4S 1-Core	\$18,750
5770SSC	1431	i External Access - E4S 1-Core	\$3,995
5770SSC	1432	Unlim Coll Users E4S 1-Core	\$3,995
5770SSC	1433	Unlimited Users - E4S 2-Core	\$50,000
5770SSC	1434	Unlimited Users - E4S 4-Core	\$75,000
5770SSC	1435	Per 10 Users - E4S 2/4-Core	\$2,500
5770SSC	1436	Per 10 Users 0-pr E4S 2/4-Core	\$0
5770SSC	1437	i Ext Access - E4S 2/4-Core	\$3,995
5770SSC	1438	Un Collab Users E4S 2/4-Core	\$5,995

5770SSC	1439	Per 10 Users - 70Y	\$2,500
5770SSC	1440	Per 10 Users Special - 70Y	\$1,250
5770SSC	1441	Unlimited Users - 70Y	\$18,750
5770SSC	1442	IBM i External Access - 70Y	\$3,995
5770SSC	1443	Unlim Collab Users - 70Y	\$3,995
5770SSC	1444	Per 10 Users - 71Y	\$2,500
5770SSC	1445	Unlimited Users - 71Y	\$50,000
5770SSC	1446	IBM i External Access - 71Y	\$3,995
5770SSC	1447	Unlim Collab Users - 71Y	\$5,995

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