Enhanced IBM DB2 and IMS tools assist in management of database environments

Overview

Three new versions, three new releases, and service updates offer many innovative features to assist database administrators (DBAs) and system programmers in managing many aspects of DB2® and IMS™.

New versions

- DB2 Administration Tool for z/OS, V7 (5697-L90)
- DB2 Object Comparison Tool for z/OS, V7 (5697-L40)
- IMS High Performance System Generation Tools for z/OS, V2 (5655-P43)

New releases

- DB2 Bind Manager for z/OS, V2.3 (5655-E43)
- DB2 Path Checker for z/OS, V2.2 (5697-I23)
- IMS Problem Investigator for z/OS, V1.2 (5655-K50)

Service updates

The following service updates are now available:

- DB2 Performance Expert for z/OS, V2 (5655-J49)
- DB2 Performance Monitor for z/OS, V8 (5655-J50)
- DB2 Buffer Pool Analyzer for z/OS, V2 (5697-H82)

Refer to APARs PK01759, PQ95989, and PQ98063.

Statement of direction: Change management functions are planned for DB2 Administration Tool for z/OS, V7 and DB2 Object Comparison Tool for z/OS, V7. These change management functions extend the existing robust change support in these tools by providing:

- Additional reporting flexibility by keeping definition information for change activity in DB2 tables
- Analysis of changes and enhanced change validation
- Notification of other related changes at the onset of defining a change
- Support for multiple users to share or combine in-progress changes
- A means to audit changes

A future service update is planned to provide this support.

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

To view a complete list of the DB2 and IMS tools, visit http://www.ibm.com/software/data/db2imstools

At a glance

New and enhanced DB2 and IMS tools deliver:

- Application management
  - DB2 Bind Manager for z/OS, V2.3 (5655-E43)
  - DB2 Path Checker for z/OS, V2.2 (5697-I23)
- Database administration
  - DB2 Administration Tool for z/OS, V7 (5697-L90)
  - DB2 Object Comparison Tool for z/OS, V7 (5697-L40)
- IMS transaction management
  - IMS High Performance Sysgen Tools for z/OS, V2 (5655-P43)
- Performance management
  - DB2 performance tools service updates
    - DB2 Performance Expert for z/OS, V2 (5655-J49)
    - DB2 Performance Monitor for z/OS, V8 (5655-J50)
    - DB2 Buffer Pool Analyzer for z/OS, V2 (5697-H82)
  - IMS Problem Investigator for z/OS, V1.2 (5655-K50)

Planned availability dates

- June 10, 2005:
  - DB2 Bind Manager for z/OS, V2.3 (5655-E43)
  - DB2 Path Checker for z/OS, V2.2 (5697-I23)
- June 17, 2005:
  - IMS High Performance System Generation Tools for z/OS, V2 (5655-P43)
- July 1, 2005:
  - DB2 Administration Tool for z/OS, V7 (5697-L90)
  - DB2 Object Comparison Tool for z/OS, V7 (5697-L40)
  - IMS Problem Investigator for z/OS, V1.2 (5655-K50)

Key prerequisites

Any hardware configuration that supports the required versions of DB2 and IMS. Details are listed in the Hardware requirements and Software requirements sections.
IBM offers more than 70 tools that feature common interfaces and cross-tool integration, tested under the same configurations and workloads as the databases they support. As we enter the era of autonomic computing, DB2 and IMS Tools will become increasingly self-managed in terms of dynamically monitoring and managing data, and taking responsibility for decision making and initiating action.

To view the list of DB2 and IMS tools, visit

http://www.ibm.com/software/data/db2imstools

**Application management**

**DB2 Bind Manager for z/OS, V2.3 (5655-E43)** allows your application programmers to safely bypass the DB2 bind process for code changes that do not alter existing SQL structures in an application.

**Key features:**
- Determine if a bind is required after an application has been precompiled and automatically reset the time stamp and bypass the bind
- Handle consistency checking between an existing DBRMLIB and a DB2 subsystem (through the DBRM Checker function)
- Match time stamps in a DBRM to time stamps in a load module
- Scan a load library for modules and CSECTS that contain static SQL

This release provides enhancements in two key functional areas:

- **Bind Avoidance**
  When moving between DB2 V7 and DB2 V8 compatibility mode, DB2 V8 will insert a CCSID into the DBRM. A feature prevents a bind if it detects that the CCSID is missing in DB2 V7 but is present in DB2 V8. This feature is an option, and it is not the default. When data is moved between EBCDIC and Unicode, a bind is always required.

- **DBRM Check Function**
  - Index Utility displays available indexes and key columns for a table
  - Catalog Cleanup generates free commands for packages without load module references
  - DBRM Builder in batch
  - DBRM/Catalog timestamp correlation report
  - Remote system access support

**DB2 Path Checker for z/OS, V2.2 (5697-I23)** helps you increase the stability of your DB2 environments and avoid painful and costly disruptions. It can help you discover and correct unwanted and unexpected access path changes before you are notified about them. These changes can occur as a result of binding when installing a new release of DB2, applying service, or migrating an application from one system to another. DB2 Path Checker can efficiently scan hundreds or thousands of SQL statements and identify just the statement or statements that have experienced or will experience an access path change. It can seamlessly integrate into your change control procedures for automated protection.

This release includes the following enhancements:
- Added estimated costs from DSN_STATEMT_TABLE to compare and report commands
- New option to display old and new SQL test where it is available from the catalog
- SYSCHG DD to provide a summary of only changed access paths
- Option REPORTCOSTGT to identify cost estimate changes where there are no access path changes
- New keyword for the TEST command to not require a DBRM, but to dynamically build it from the catalog
- New SPUFI commands to generate the EXPLAIN, COMPARE, and TEST commands to a file

**Database administration**

**DB2 Administration Tool for z/OS, V7 (5697-L90)** allows you to manage the tasks that keep DB2 performing at peak levels. It provides a comprehensive set of functions that help DB2 personnel manage their DB2 environments efficiently and effectively. DB2 Administration Tool, used in conjunction with DB2 Object Comparison Tool, offers a function-rich object management solution. Both tools are designed with an easy-to-use interactive system productivity facility (ISPF) interface that lets you manage and process the DB2 objects, and organize them for better system throughput. DB2 Administration Tool provides in-depth catalog navigation by displaying and interpreting objects in the DB2 catalog and executing dynamic SQL statements. It is integrated with other DB2 utilities to simplify the creation of DB2 utility jobs, which creates additional functionality with product-specific line commands for table editing, SQL cost analysis, and path check analysis.

This version includes the following enhancements:
- Catalog Query:
  - Allow * or % for wild carding
  - GRANT primary command to grant authorizations to a set of objects to one or more users
  - View LIMITKEY information more directly
  - Eliminate small objects from performance queries
  - Improved use of color when viewing SQL statements in plan/package
  - FIND capability on table display
  - New DSP command to show database structures with dependent plans/packages
  - BIND/REBIND primary commands with only non-default syntax
  - REVOKE primary command to revoke all authorities
  - STA and STO primary commands to start and stop all objects in display
  - New DSN line command to show data set names
  - Show SQL statement from Explain panels
  - GEN STOGROUP and SYNONYM
- **Redefine:**
  - Change the database for a table space
  - Change index creator or name
  - RESTRICT ON DROP warning
IMS Resource Update List

The IMS Resource Update List is the key to the IMS system definition incremental change process. A resource Update List is a list of changes (add, delete, or update) for IMS resources (databases, applications, transactions, or Fast Path route codes).

The IMS HP Sysgen Tools ISPF interface provides you with the ability to manage IMS Resource Update lists. Creating an update list entry is as simple as choosing a function (add, update, or delete), choosing a resource type (database, program, transaction, or route code), and choosing the resource name. You can also decide to model the definition after another existing resource (for example, copy the attributes from another transaction) and then simply update any resource option (for example, the transaction class) and save the entry. Add as many entries to the Resource Update List as desired.

The Resource Update List can be validated prior to implementing the changes. The validation process verifies that all of the changes requested in the Resource Update List can be successfully implemented in a particular IMS system. Any conflicts or incompatibilities with the update list are identified and displayed at your TSO terminal.

The implementation of the Resource Update List is as simple as selecting the Update List and typing go. Changes take effect immediately and are maintained across IMS restarts and cold starts.

Issue IMS commands

From the ISPF interface, you can issue any authorized IMS command. The command response is displayed at your terminal.

View IMS resource definitions

You can view IMS resource definitions (databases, application programs, transactions, and route codes) in ISPF table format and sort resources by any resource attribute (for example, SPA size) to identify those resources that have an attribute.

Reverse Sysgen and Security Gen

Create IMS sysgen and security gen source from the IMS libraries (MODBLKS, MATRIX, and SDFSRESL, formerly known as RESLIB) under ISPF.

Because Resource Update List execution also updates the IMS libraries to reflect the changes, the reverse sysgen process always provides the current resource definitions.

Fastgen

Fastgen is still a part of IMS HP Sysgen Tools, and now features an ISPF interface. You can validate or execute IMS MODBLKS syssgen under ISPF.

DB2 Object Comparison Tool for z/OS, V7 (5697-L40) maximizes system availability by keeping production and testing database environments running in parallel. This tool, used in conjunction with DB2 Administration Tool, offers a function-rich object management solution. Both tools are designed with an easy-to-use ISPF interface that lets you manage and process the DB2 objects, and organize them for better system throughput. DB2 Object Comparison Tool simplifies the process of comparing objects and their dependents from different sources and then synchronizing the sources, consistently keeping production databases in step with those for testing and development.

This new version provides the following enhancements:

- Summary report improvements
- Allow utility options
- Amend LOAD card statement
- Definition of target from source specification
- Batch interface enhancements
- Escalate to tablespace for partitioned tables
- Masking of column names

IMS transaction management

IMS High Performance Sysgen Tools for z/OS, V2 (5655-P43) contains all of the features and functions of the previous version:

- Fast Sysgen
- Merge Clone
- Sysgen Compare

With Version 2 of IMS HP Sysgen Tools for z/OS, an ISPF interface is added to improve your productivity. Using the new ISPF interface, you can:

- Create a list of IMS resource changes
- Validate the list of changes
- Implement the list of changes
- Issue IMS commands
- View current sysgen resources
- Use reverse sysgen and security gen
- Validate MODBLKS sysgen source
- Perform MODBLKS sysgen
Performance management

DB2 Performance Expert for z/OS, V2 (5655-J49), DB2 Performance Monitor for z/OS, V8 (5655-J50), and DB2 Buffer Pool Analyzer for z/OS, V2 (5697-H82) have important new functions available with APARs PQ98063, PG95989, and PK01759.

- Monitoring of storage consumption within the DBM1 address space is extended:
  - Additional information in reports, the performance database, and the online monitoring client GUI is provided
  - Real storage
  - Derived fields:
    -- Show the average thread storage used
    -- A recommended number of maximum threads depending on thread storage
    -- Other fixed and variable storage usage
- The I/O Activity Report can now be generated per defined time interval while using the INTERVAL option.
- The Locking Suspension Report output can now be optionally externalized as a comma separated sequential file (.csv) which can be used for loading into spreadsheets for further analysis.
- The SQL Activity Trace function now allows optionally requesting the display of the input host variable per SQL statement execution.
- Using the Buffer Pool Analyzer function, the partition numbers are now saved into the Buffer pool analyzer DB2 tables.
- A new optional function prevents the load of inactive (not-used) object data into the Buffer Pool Analyzer DB2 tables.

IMS Problem Investigator for z/OS, V1.2 (5655-K50) provides an enhanced level of problem determination services for IMS Transaction Manager and IMS Database Manager Systems. These services include navigation aids and investigative procedures for IMS log data, CQS log data, user log data and IMS Connect Extensions event data, as well as formatted and personalized reporting. Powerful automated features help to reduce the amount of time required to identify and analyze defects or other events of interest in the IMS log. Services can be accessed using an ISPF dialog or a batch reporting utility.

IMS Problem Investigator for z/OS is similar in functionality to the IMS File Select and Formatting Print utility, but offers advanced features that make log analysis quicker and easier.

The new features and enhancements include:

- CQS log record analysis
  Provides comprehensive formatting of CQS log records from the ISPF dialog or batch reporting utility, including all of the facilities available for IMS log record analysis:
  - Presentation either IMS Problem Investigator formatted or ISPF browse modes
  - Reporting against every field in every CQS log record type
  - Filtering at the field name level
  - Forms to customize report format
- Tracking by unit-of-work ID to replay transaction life-cycles
- User log record support
  User log records can be analyzed using the same powerful features available with IMS log records. An online utility converts your mapping DSECT to a Knowledge Module. IMS Problem Investigator formatting and reporting, Filters and Forms can be used to analyze user log records.
- Tracking enhancements
  - More flexible tracking criteria, including OTMA clients
  - Tracking support in batch report requests
  - Backward tracking support
  - Support for starting and running the tracking while viewing a formatted log record, without needing to return to the browse session
- IMS Connect Extensions for z/OS, V1.1 (5655-K48) event data support
  IMS Connect Extensions collects comprehensive performance and problem-related data for IMS Connect systems. IMS Problem Investigator for z/OS supports IMS Connect Extensions for z/OS event data collected in Archive Journal data sets, including formatting and the other features available with IMS log records.
- IMS Performance Analyzer for z/OS, V3.3 (5655-E15) System Definitions
  IMS Performance Analyzer for z/OS System Definitions can now be shared with IMS Problem Investigator. IMS systems and IMS groups can be maintained from either dialog, and reporting using DBRC log selection is available.
- Dialog enhancements
  - Forms can now be used to format log records in the dialog, complementing batch formatting
  - Control Data Set utility commands allow you to transfer Filter and Form definitions from one Control Data Set to another
  - New SKIP command while viewing a formatted log record allows you to skip to the next or previous record without returning to the Browse session
  - New TOP command moves the selected log file to the top of the Process list
- Filter enhancements
  - Request tracking for batch reports using the Filter
  - Exclude individual log codes
- Dynamic filtering
  Filtering criteria can be dynamically changed during a browse session, including the ability to:
  - Suspend/resume filtering
  - Review/change your active filtering options
  - New line action to exclude individual log codes in IMS Problem Investigator formatted browse mode
Section 508 of the U.S. Rehabilitation Act

The products in this announcement are capable as of their planned availability, when used in accordance with associated IBM documentation, of satisfying the applicable requirements of Section 508 of the Rehabilitation Act, provided that any assistive technology used with the product properly interoperates with it.

Value Unit-based pricing

Value Unit pricing for eligible zSeries® IPLA programs enables a lower cost of incremental growth and enterprise aggregation. Each zSeries IPLA product with Value Unit pricing has a single price per Value Unit and a conversion matrix, called Value Unit Exhibit, for converting from some designated measurement to Value Units. Most commonly Millions of Service Units (MSUs) is the measurement designated by IBM to be converted to Value Units. Some other measurements are engines or messages. Since MSUs are the most common measurement, that measurement will be used for the remainder of this description.

Value Unit pricing offers price benefits for customers. For each zSeries IPLA program with Value Unit pricing, the quantity of that program needed to satisfy applicable IBM terms and conditions is referred to as the “required license capacity.” Each of the various Value Unit Exhibits stipulate that the larger your required license capacity, the fewer Value Units per MSU you will need. Value Unit Exhibits are uniquely identified by a three-digit code and referred to using the nomenclature VUExxx, where xxx is the three-digit code.

Subsequent acquisitions of Value Unit priced programs offer additional price benefits for customers. The quantity of each zSeries IPLA program that you have acquired is referred to as “entitled license capacity.” If you wish to grow your entitled license capacity for a zSeries IPLA program, the calculation to determine additional needed Value Units is based upon the number of Value Units already acquired.

For each zSeries IPLA program with Value Unit Pricing, you should:

• Determine the required license capacity, in MSUs
• Aggregate the MSUs across the enterprise
• Convert the total MSUs to Value Units, using the applicable Value Unit Exhibit
• Multiply the price per Value Unit by the total number of Value Units to determine the total cost

To simplify conversion from the designated measurement to Value Units or vice-versa, use the Value Unit Converter Tool. For additional information or to obtain a copy of the Value Unit Converter Tool, visit the Value Unit Converter Tool Web site

http://ibm.com/zseries/swprice/vuctool

Note that Value Units of a given product cannot be exchanged, interchanged, or aggregated with Value Units of another product.

To determine the required license capacity for the zSeries IPLA program you selected, refer to the Terms and conditions section.

IPLA and subscription and support considerations

IPLA licenses can be transferred from one machine to another within, but not limited to an enterprise. The customer may aggregate the capacity for all the processors the product is operated on to achieve a more economic price. This will result in a single Proof of Entitlement. It is the customer’s responsibility to manage the distribution of Value Units within the limits of the entitlement of the product license.

Subscription and Support must cover the same capacity as the product license entitlement. Subscription and Support will be available in the country in which the agreement is made.

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).

BP Attachment for Announcement Letter 205-141


Trademarks

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Offering Information

Product information is available via the Offering Information Web site

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

Publications

The IBM Publications Center portal is at

http://www.ibm.com/shop/publications/order

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

One copy of the following publications is supplied automatically with the basic machine-readable material.

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The following publications cannot be ordered in hardcopy. They are available at

http://www.ibm.com/software/data/db2imstools

Publications on CD-ROM for the products in this announcement will be available on the next release of z/OS Software Products Collection (SK3T-4270) in BookManager® and PDF formats.

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The following material is available at

http://www.ibm.com/software/data/db2imstools

- Overview brochure: DB2 and IMS Tools (GC27-1070)
- Fact sheets:
  - DB2 Administrative and Change Management Tools (includes DB2 Administration Tool and DB2 Object Comparison Tool) G507-1451 (includes DB2 Bind Manager and DB2 Path Checker) GC27-1037
  - DB2 Path Analysis and Bind Management Tools (includes DB2 Bind Manager and DB2 Path Checker) GC27-1037
  - IMS High Performance System Generation Tools for z/OS (GC27-1073)
  - IMS Problem Investigator for z/OS (GC18-7783)

Specification sheets, user’s guides, and white papers are also available on CD-ROM (GK3T-7099). This CD-ROM can be ordered from the IBM Publications Center Portal at

http://www.ibm.com/shop/publications/order

This announcement is provided for your information only. For additional information, contact your IBM representative, call 800-IBM-4YOU, or visit the IBM home page at: http://www.ibm.com.
Technical information

Hardware requirements: The products in this announcement will operate on any hardware configuration that supports the required versions of DB2 and IMS.

Software requirements: The DB2 products in this announcement require DB2 V7, or later.
- DB2 V7 (5675-DB2)
- DB2 V8 (5625-DB2)

The IMS products in this announcement require IMS V7, or later.
- IMS V7 (5655-B01)
- IMS V8 (5655-C56)
- IMS V9 (5655-J38)

IMS Problem Investigator for z/OS, V1.2 (5655-K50) has the capability to:
- Process IMS Connect Extensions event records. If you have IMS Connect Extensions for z/OS (5655-K48) installed and are collecting event data, then this feature will allow you to view the formatted IMS Connect Extensions event records.
- Share the IMS Performance Analyzer Profile Library. If you use IMS Performance Analyzer, V3.3 (5655-E15), your IMS Performance Analyzer System Definitions and Groups are shared with IMS Problem Investigator for z/OS. Changes to definitions in one product are reflected in the other.

Customer requirements:

Customer requirements are used extensively to determine how the database tools evolve.

DB2 Administration Tool for z/OS, V7 (5697-L90) and DB2 Object Comparison Tool for z/OS, V7 (5697-L40) satisfy the following requirements:
- MR012304375
- MR0206032610
- MR0226033324
- MR0304024113

DB2 Bind Manager for z/OS, V2.3 (5655-E43) satisfies the following requirements:
- MR0319045812
- MR0611044645
- MR0720416048

DB2 Path Checker for z/OS, V2.2 (5697-I23) satisfies the following requirements:
- MR1007307328
- MR1110031815
- MR1111036321
- MR1126032011

IMS HP Sysgen Tools for z/OS, V2 (5655-P43) satisfies the following requirements:
- MR0319032115
- MR0321023931
- MR0616046550
- MR0618024047

Planning information

Packaging: The programs in this announcement are distributed with the following content:
- Basic machine-readable material on tape
- Program Directory
- Proof of Entitlement (PoE)
- IBM International Program License Agreement (IPLA)

Security, auditability, and control

The announced programs use the security and auditability features of the host operating system software. The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communication facilities.

Ordering information

Charge metric

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The programs in this announcement all have Value Unit-based pricing.

For each IBM @server® zSeries® IPLA program with Value Unit pricing, the quantity of that program needed to satisfy applicable IBM terms and conditions is referred to as the "required license capacity." Your required license capacity is based upon the following factors:
The zSeries IPLA program you select

The applicable Value Unit exhibit

The applicable terms

Whether your current mainframes are full-capacity or sub-capacity

**Value Unit exhibit VUE007**

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**Value Units for mainframes without MSU ratings:**

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<thead>
<tr>
<th>Hardware machine</th>
<th>Value Units/</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP3000 H30</td>
<td>6</td>
</tr>
<tr>
<td>MP3000 H50</td>
<td>8</td>
</tr>
<tr>
<td>MP3000 H70</td>
<td>12</td>
</tr>
<tr>
<td>ESL Models</td>
<td>2</td>
</tr>
</tbody>
</table>

**Ordering example:** The total number of Value Units is calculated according to the following example.

If your required license capacity is 1,500 MSUs for your selected zSeries IPLA product, the applicable Value Units would be:

**Translation from MSUs to Value Units**

<table>
<thead>
<tr>
<th>MSUs * Value Units/MSU</th>
<th>Value Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base 3</td>
<td>1.00</td>
</tr>
<tr>
<td>Tier A 4</td>
<td>0.45</td>
</tr>
<tr>
<td>Tier B 130</td>
<td>0.36</td>
</tr>
<tr>
<td>Tier C 140</td>
<td>0.27</td>
</tr>
<tr>
<td>Tier D 1,185</td>
<td>0.20</td>
</tr>
<tr>
<td>Total 1,500</td>
<td>343.50</td>
</tr>
</tbody>
</table>

When calculating the total number of Value Units, the sum is to be rounded up to the next integer.

**Ordering z/OS through the Internet**

ShopzSeries (formerly SHOPS390) provides an easy way to plan and order your z/OS ServerPac or CBPDO. It will analyze your current installation, determine the correct product migration, and present your new configuration based on z/OS. Additional products can also be added to your order (including determination of whether all product requisites are satisfied). ShopzSeries is available in the U.S. and several countries in Europe. In countries where ShopzSeries is not available yet, contact your IBM representative (or Business Partner) to handle your order via the traditional IBM ordering process. For more details and availability, visit the ShopzSeries Web site at [http://www14.software.ibm.com/webapp/ShopzSeries/ShopzSeries.jsp](http://www14.software.ibm.com/webapp/ShopzSeries/ShopzSeries.jsp)

**Basic license: On/Off Capacity on Demand (On/Off CoD)**

The products in this announcement are eligible for On/Off CoD with a Temporary Use Charge calculated based on MSUs-per day usage.

The On/Off CoD ordering information for the following products has not changed. Therefore, their On/Off CoD ordering information is not included in this announcement.

**The On/Off CoD ordering information for the other products in this announcement follows:**

| Program name: DB2 Administration Tool for z/OS, V7 Program PID: 5697-L90 |
|-----------------|------------------|-------------------------|
| Entitlement Identifier | Description | License option/ Pricing metric |
| SO11VVC          | DB2 Administration Tool V7 Basic OTC, Per MSU-day TUC |

| Program name: DB2 Object Comparison Tool for z/OS, V7 Program PID: 5697-L40 |
|-----------------|------------------|-------------------------|
| Entitlement Identifier | Description | License option/ Pricing metric |
| SO11VVC          | DB2 Object Comparison Tool V7 Basic OTC, Per MSU-day TUC |

| Program name: IMS High Performance Sysgen Tools for z/OS, V2 Program PID: 5655-P43 |
|-----------------|------------------|-------------------------|
| Entitlement Identifier | Description | License option/ Pricing metric |
| SO10KPH          | IMS HP Sysgen Tools V2 Basic OTC, Per MSU-day TUC |

**Translation from MSUs to Value Units**

<table>
<thead>
<tr>
<th>MSUs</th>
<th>Value Units/MSU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base 1-3</td>
<td>1.00</td>
</tr>
<tr>
<td>Tier A 4-45</td>
<td>.45</td>
</tr>
<tr>
<td>Tier B 46-175</td>
<td>.36</td>
</tr>
<tr>
<td>Tier C 176-315</td>
<td>.27</td>
</tr>
<tr>
<td>Tier D 316+</td>
<td>.20</td>
</tr>
</tbody>
</table>

To order, specify the program product number and the appropriate license or charge option. Also, specify the desired distribution medium. To suppress shipment of media, select the license-only option in CFSW.

The ordering information for the following products has not changed. Therefore, their ordering information is not included in this announcement.

| Program name: DB2 Administration Tool for z/OS, V7 Program PID: 5697-L90 |
|-----------------|------------------|-------------------------|
| Entitlement Identifier | Description | License option/ Pricing metric |
| SO11VVC          | DB2 Administration Tool V7 Basic OTC, Value Units |
Revised IBM Operational Support Services — SoftwareXcel

Subscription and Support

To receive voice technical support via telephone during normal business hours and future releases and versions at no additional charge, Subscription and Support must be ordered. The capacity of Subscription and Support (Value Units) must be the same as the capacity ordered for the product licenses.

To order, specify the Subscription and Support program number (PID) previously referenced and the appropriate license or charge option.

IBM is also providing Subscription and Support for these products via a separately purchased offering under the terms of the IBM International Agreement for Acquisition of Support (IAAS). This offering:

- Includes and extends the support services provided in the base support to include technical support via telephone during normal business hours.
- Entitles customers to future releases and versions at no additional charge. The customer is not entitled to new products.

When Subscription and Support is ordered, the charges will renew automatically annually unless cancelled by the customer.

Single version charging: To elect single version charging, the customer must notify and identify to IBM the prior program and replacement program and the machine the programs are operating on.

Customized Offerings

Product media is shipped only through Customized Offerings (for example, CBPDO, ServerPac, SystemPac®). Non-customized items (CDs, diskettes, source media, media kits) will continue to be shipped via the stand-alone product.

Terms and conditions

Licensing: IPLA. PoEs are required for all authorized use.

These products are licensed under the IPLA, the associated Agreement for Acquisition of Support, and the Addendum for Support (Z125-6336), which offer support with ongoing access to releases and versions of the program. These programs have a one-time license charge for use of the program and an ongoing recurring charge for the enhanced support that includes telephone assistance (voice support for defects during normal business hours) and access to updates, releases, and versions of the program as long as support is in effect. IBM Operational Support Services — Support Line for S/390® and zSeries is an option for customers who want added services.

Limited warranty applies: Yes

Warranty: This program has warranty for a minimum of one year from acquisition from IBM or authorized IBM Business Partner. The warranty provided to the customer, for at least one year from acquisition, is access to databases (read Web sites) for program information and FAQs, including any known fixes to defects, which the customer can download or obtain otherwise and install at leisure.

Program support: Enhanced Support, called Subscription and Support, includes telephone assistance (voice support for defects during normal business hours) as well as access to updates, releases, and versions of the program as long as support is in effect. The customer will be notified of discontinuance of support with 12 months’ notice.

Money-back guarantee: If for any reason you are dissatisfied with the program and you are the original licensee, return it within 30 days from the invoice date, to the party (either IBM or its reseller) from whom you acquired it, for a refund. For clarification, note that for programs acquired under any of IBM’s On/Off CoD software offerings, this term does not apply, since these offerings apply to programs already acquired and in use by the customer.

Copy and use on home/portable computer: No

Volume orders (IVO): No

Passport Advantage® applies: No

Software Maintenance applies: No

For Operating System software, the revised IBM Operational Support Services — SoftwareXcel offering will provide support for those operating systems and associated products that are not available with the newly announced Software Maintenance offering. This will ensure total support coverage for your enterprise needs, including IBM and selected non-IBM products. For complete lists of products supported under both the current and revised SoftwareXcel offering, visit http://www.ibm.com/services/sl/products

For additional information on the revised IBM Operational Support Services, refer to Services Announcement 601-023, dated July 10, 2001.

IBM operational support services — SoftwareXcel: Yes
Sub-capacity terms and conditions

For each zSeries IPLA program with Value Unit pricing, the quantity of that program needed to satisfy applicable IBM terms and conditions is referred to as the "required license capacity." Your required license capacity is based upon the following factors:

- The zSeries IPLA program you select
- The applicable Value Unit exhibit
- The applicable terms
- Whether your current mainframes are full-capacity or sub-capacity

For more information on the Value Unit exhibit for the zSeries IPLA program you selected, refer to the Ordering information section.

<table>
<thead>
<tr>
<th>Program name</th>
<th>Terms</th>
<th>Parents, if applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>DB2 Administration Tool for z/OS, V7</td>
<td>Referenced-based</td>
<td>DB2 V7 (5675-DB2) or DB2 V8 (5625-DB2)</td>
</tr>
<tr>
<td>(5697-L90)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DB2 Bind Manager for z/OS, V2.3</td>
<td>Referenced-based</td>
<td>DB2 V7 (5675-DB2) or DB2 V8 (5625-DB2)</td>
</tr>
<tr>
<td>(5655-E43)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DB2 Object Comparison Tool for z/OS, V7</td>
<td>Referenced-based</td>
<td>DB2 V7 (5675-DB2) or DB2 V8 (5625-DB2)</td>
</tr>
<tr>
<td>(5697-L40)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DB2 Path Checker for z/OS, V2.2</td>
<td>Referenced-based</td>
<td>DB2 V7 (5675-DB2) or DB2 V8 (5625-DB2)</td>
</tr>
<tr>
<td>(5697-L23)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMS High Performance SystemTools for z/OS, V2</td>
<td>Referenced-based</td>
<td>IMS V7 (5655-B01) or IMS V8 (5655-C56) or IMS V9 (5655-J38)</td>
</tr>
<tr>
<td>(5655-P43)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMS Problem Investigator for z/OS, V1.2</td>
<td>Referenced-based</td>
<td>IMS V7 (5655-B01) or IMS V8 (5655-C56) or IMS V9 (5655-J38)</td>
</tr>
<tr>
<td>(5655-K50)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Full-capacity mainframes: In cases where full-capacity is applicable, the following terms apply:

- **Execution-based, z/OS-based, full-machine-based**: The required capacity of a zSeries IPLA program with these terms equals the MSU-rated capacity of the machines where the zSeries IPLA program executes.

For more information on mainframe MSU-rated capacities, refer to The System/370, System/390, and zSeries Machine Exhibit (Z125-3901) or visit the “Mainframes” section of the zSeries Exhibits Web site.

Sub-capacity mainframes: In cases where sub-capacity is applicable, the following terms apply:

- **Execution-based**: The required capacity of a zSeries IPLA sub-capacity program with these terms equals the capacity of the LPARs where the zSeries IPLA program executes.

- **z/OS-based**: The required license capacity of a zSeries IPLA program with these terms equals the license capacity of z/OS (and z/OS.e) on the machines where the zSeries IPLA program executes.

- **Reference-based**: The required license capacity of a zSeries IPLA program with these terms equals the license capacity of the applicable monthly license charge (MLC) program. This MLC program is called the "parent" program.

- **Full machine-based**: The required license capacity of a zSeries IPLA program with full machine-based terms equals the MSU-rated capacity of the machines where the zSeries IPLA program executes.

For more information on sub-capacity zSeries IPLA terms and conditions, refer to Software Announcement 204-184, dated August 10, 2004.

Additional information for products with reference-based terms, zSeries IPLA sub-capacity programs with reference-based terms adds value to the parent program across the environment, regardless of where in the environment the zSeries IPLA program executes.

An environment is defined as either a single/stand-alone machine or a qualified Parallel Sysplex®. Customers may have one or more different environments across their enterprise. To determine the required license capacity for each zSeries IPLA program with referenced-based terms, each environment should be assessed separately.

When a zSeries IPLA sub-capacity program with reference-based terms is used in a qualified Parallel Sysplex environment, the required license capacity of the zSeries IPLA program must equal the license capacity of the parent program across the Parallel Sysplex. Qualified Parallel Sysplex refers to one:

- That meets the criteria defined in Hardware Announcement 198-001, dated January 13, 1998
- Where MLC pricing is aggregated across the Sysplex

Sub-capacity eligibility: To be eligible for sub-capacity charging on select zSeries IPLA programs, you must first implement and comply with all terms of either sub-capacity Workload License Charges (WLC) or sub-capacity Entry Workload License Charges (EWLC). To implement sub-capacity WLC or EWLC, a machine must be zSeries (or equivalent). On that machine:

- All instances of the OS/390® operating system must be migrated to the z/OS (or z/OS.e) operating systems
- Any licenses for the OS/390 operating system must be discontinued
- All instances of the z/OS operating (or z/OS.e) systems must be running in z/Architecture™ (64-bit) mode
For that machine, you must create and submit a Sub-Capacity Report to IBM each month. Sub-Capacity Reports must be generated using the Sub-Capacity Reporting Tool (SCRT). For additional information or to obtain a copy of SCRT, visit the zSeries Software Pricing Web site

http://ibm.com/zseries/swprice

You must comply with all of the terms of the WLC or EWLC offering, whichever is applicable:

• The complete terms and conditions of sub-capacity WLC are defined in the IBM Customer Agreement — Attachment for zSeries Workload License Charges (Z125-6516).

• The complete terms and conditions for sub-capacity EWLC are defined in the IBM Customer Agreement — Attachment for z800 and z990 Software License Charges (Z125-6587).

Additionally, you must sign and comply with the terms and conditions specified in the amendment to the IPLA contract — Amendment for zSeries Platform Programs Sub-Capacity Pricing (Z125-6929). Once the amendment is signed, the terms in the amendment replace any and all previous zSeries IPLA sub-capacity terms and conditions.

Sub-capacity utilization determination

Sub-capacity utilization is determined based on the utilization of a sub-capacity eligible reference product and machine.

On/Off CoD

To be eligible for On/Off CoD pricing, customers must be enabled for temporary capacity on the corresponding hardware, and the required contract — Z125-6611, Attachment for Customer Initiated Upgrade and IBM eServer On/Off Capacity on Demand — Software — must be signed prior to use.

Prices

Information on charges is available at

http://www.ibmlink.ibm.com/

Select United States and then click IBMLink 2000.

Pricing information for the following products has not changed. Therefore, it is not included in this announcement.

<table>
<thead>
<tr>
<th>Product name</th>
<th>PID</th>
</tr>
</thead>
<tbody>
<tr>
<td>DB2 Bind Manager for z/OS, V2.3</td>
<td>6555-443</td>
</tr>
<tr>
<td>DB2 Path Checker for z/OS, V2.2</td>
<td>6555-723</td>
</tr>
<tr>
<td>IMS Problem Investigator for z/OS, V1.2</td>
<td>6555-850</td>
</tr>
<tr>
<td>Subscription and Support for DB2 Administration Tool</td>
<td>6555-990</td>
</tr>
<tr>
<td>Subscription and Support for DB2 Bind Manager</td>
<td>6555-998</td>
</tr>
<tr>
<td>Subscription and Support for DB2 Object Comparison Tool</td>
<td>6555-640</td>
</tr>
<tr>
<td>Subscription and Support for DB2 Path Checker</td>
<td>6555-949</td>
</tr>
<tr>
<td>Subscription and Support for IMS SyGen Tools</td>
<td>6555-542</td>
</tr>
<tr>
<td>Subscription and Support for IMSProblem Investigator</td>
<td>6555-551</td>
</tr>
</tbody>
</table>

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Order now

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Fax: 800-2IBM-FAX (242-6329)  
Internet: ibm_direct@vnet.ibm.com  
Mail: IBM Americas Call Centers  
Dept: IBM CALL, 11th Floor  
105 Moatfield Drive  
North York, Ontario  
Canada M3B 3R1

Reference: LE001
The Americas Call Centers, our national direct marketing organization, can add your name to the mailing list for catalogs of IBM products.

**Note:** Shipments will begin after the planned availability date.

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