



IBM InfoSphere Optim pureQuery Runtime for z/OS, V3.2 and IBM InfoSphere Optim Query Workload Tuner for DB2 for z/OS , V3.2 help accelerate development and improve manageability of databases

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At a glance

IBM® InfoSphere® Optim™ Query Workload Tuner for z/OS®, V3.2 and IBM InfoSphere Optim pureQuery™ Runtime for z/OS , V3.2:

- Improve performance and can help reduce cost of ownership for DB2® for z/OS
- Improve and streamline analysis of SQL workloads, facilitate iterative improvements, and enhance what-if analysis
- Enhance workload access plan comparisons that include generation of hints to lock down access plans and compare access plans for workloads on different systems
- Improve usability by making it easier to configure tools in IBM WebSphere® environment and simplify the SQL capture process

For ordering, contact Your IBM representative or an IBM Business Partner.
For more information contact the Americas Call Centers at
800-IBM-CALL (426-2255).

Reference: LE001

Overview

IBM InfoSphere Optim Query Workload Tuner for DB2 z/OS , V3.2 provides expert, actionable guidance for improving the performance of queries and query workloads. Advisors provide guidance on queries, statistics, and indexes. V3.2 enables database administrators (DBAs) or developers to compare access plans for iterative tuning, what-if analysis, and as preparation for database or application migration. Additional enhancements simplify what-if analysis that make it easier to understand the impact of changes before they are made, make it easier to capture a workloads for tuning, and streamline workflow with IBM DB2 Query Monitor for z/OS and IBM Data Studio.

IBM InfoSphere Optim pureQuery Runtime for z/OS , V3.2 provides the ability to improve SQL performance and helps mitigate security risks of both new and existing applications. Use InfoSphere Optim pureQuery Runtime for z/OS to lock in SQL access path for consistent application performance.

Use InfoSphere Optim pureQuery Runtime for z/OS to replace poorly performing SQL on the fly processing to better manage SQL statements run by applications developed using frameworks such as Hibernate. Many enhancements to V3.2 make

it easier to install and provide for more flexibility in both configuration and tuning. Capturing SQL from the DB2 for z/OS dynamic cache makes it even easier to optimize your applications.

Key prerequisites

Refer to the [Hardware requirements](#) section for details.

Planned availability date

December 14, 2012

Description

IBM InfoSphere Optim Query Workload Tuner for DB2 z/OS , V3.2 provides assistance in tuning both individual SQL statements as well as tuning advice for a complete SQL workload, taking the whole workload into account. Advisors provide guidance on statistics, indexes, query revision, and access path issues and comparison.

New in V3.2:

- Improvements in what-if analysis allows for determining the impact on a workload of a change to one or more indexes. You can determine the possible benefit or negative impact on a workload by the virtual creation or dropping of an index without actually implementing the change.
- Use the new workload access plan comparator to compare access paths using the what-if scenario or to compare access paths between two workloads, even on different systems such as test and production. The workload access plan comparator can also be used to assist in locking down access plans for very large workloads.
- The index advisor may now provide recommendations for the elimination of existing nonunique indexes due to existing near-duplicate unique indexes. It now supports modification of existing index and provides recommendations involving INCLUDE columns on DB2 10 for z/OS for existing indexes. In addition, it recommends indexes needed for one-fetch index scan. It also now displays the LAST_USED time for existing indexes to further help with the analysis of the use of an index.
- Use the separately licensed IBM DB2 Query Monitor for z/OS to monitor the application and SQL performance, identify the top performance problem statements, and tune these statements as a query workload using IBM InfoSphere Optim Query Workload Tuner.
- User can create instance level plan hint for IBM DB2 10 for z/OS new function mode.

IBM InfoSphere Optim pureQuery Runtime for z/OS , V3.2 provides the ability to improve SQL performance of both new and existing applications. Use pureQuery to lock down SQL access plans, replace poorly performing SQL on the fly, or to help locate SQL to be changed in source code. It also helps track and manage SQL statements executed by applications developed using frameworks such as Hibernate.

New in V3.2

- New configuration scripts make it easier to install InfoSphere Optim pureQuery Runtime on a IBM WebSphere application server.
- Applications using SQL may now be captured directly from the DB2 dynamic cache, simplifying and reducing the application SQL capture process and reducing the time needed to use InfoSphere Optim pureQuery Runtime for z/OS to optimize applications.

- Users can activate on demand pureQuery property changes that control client application behavior.
- InfoSphere Optim pureQuery Runtime for z/OS can be configured to use different repositories, which provides you with several benefits including supporting use of different repositories for different application verticals. Repositories used by different versions of InfoSphere Optim pureQuery Runtime for z/OS may now reside on the same database through the support of multiple schemas.
- Users can identify and support singleton select statements used by applications to improve performance by using less expensive methods to retrieve database data.

Accessibility by people with disabilities

A US 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

Section 508 of the US Rehabilitation Act

IBM InfoSphere Optim pureQuery Runtime for z/OS V3.2 is capable as of December 7, 2012, when used in accordance with IBM's associated 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. A US Section 508 Voluntary Product Accessibility Template (VPAT) can be requested at

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

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=212-479>

Value Unit-based pricing

Value Unit pricing for eligible IBM System z® IBM International Program License Agreement (IPLA) programs enables a lower cost of incremental growth and enterprise aggregation. Each System z 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 you. For each System z 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. The quantity of each System z IPLA program that you have acquired is referred to as **entitled license capacity**. If you wish to grow your entitled license capacity for a System z IPLA program, the calculation to determine additional needed Value Units is based upon the number of Value Units already acquired.

For each System z 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 website

<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 System z IPLA program you selected, refer to the [Terms and conditions](#) section.

Product positioning

The following separate products provide targeted functionality yet are integrated with each other to provide a continuous workflow.

IBM InfoSphere Optim Query Workload Tuner (or IBM InfoSphere Optim Query Tuner)

IBM InfoSphere Optim Query Workload Tuner facilitates query and query workload analysis and provides expert recommendations for improving query and query workload performance. Use IBM DB2 Query Monitor for z/OS to identify slow running queries, top CPU consumers, or query workloads needing performance improvements and seamlessly transfer them to InfoSphere Optim Query Workload Tuner for analysis and recommendations. InfoSphere Optim Query Workload Tuner facilitates query analysis using query formatting annotated with relevant statistics, access plan graphical or hierarchical views, and access plan analysis. It further provides recommendations for improving query structure, statistics collection, and indexes including generated command syntax and rationale for the recommendations.

IBM Data Studio

IBM Data Studio provides database development and administration tooling for DB2 and other databases at no charge. When performance problems indicate a need for database configuration changes, Data Studio may be used to make configuration changes, object changes, create and schedule command scripts, and more.

When using Data Studio for query development, developers can use the IBM Tivoli® OMEGAMON® XE for DB2 Performance Expert on z/OS Extended Insight integration to see the actual performance improvements across iterations of query executions. Data Studio also includes a taste of the Query Tuner capabilities providing integrated query transfer from IBM DB2 Query Monitor for z/OS query formatting, access plan visualization, and statistics advice for a single query.

IBM Data Studio tightly integrates with IBM InfoSphere pureQuery Runtime to facilitate rapid development of database client application code in Java™ following best practices.

IBM InfoSphere Optim Configuration Manager

IBM InfoSphere Optim Configuration Manager helps organizations discover, manage, and track their database and client inventory, configuration, and deployments. When performance degradation occurs, the first question is often What changed? IBM Tivoli OMEGAMON XE for DB2 Performance Expert on z/OS provides integration with InfoSphere Optim Configuration Manager to view changes for the performance

context in question so database administrators (DBAs) can quickly determine whether recent changes may be the underlying cause of performance issues.

IBM InfoSphere Optim pureQuery Runtime for z/OS

IBM InfoSphere Optim pureQuery Runtime for z/OS is used by both developers and administrators to simplify application code, improve application performance, and improve data security. When used with Data Studio, it helps developers rapidly build database applications reinforcing best practices. The run time may be used by DBAs to improve SQL performance for an application without having to modify the application. InfoSphere Optim pureQuery Runtime for z/OS may be used to improve data security by allowing execution of only approved SQL.

Program number

Program number	VRM	Program name
5655-w92	3.2	InfoSphere Optim pureQuery Runtime for z/OS
5655-w94	3.2	IBM InfoSphere Optim Query Workload Tuner for DB2 for z/OS v3.2

Product identification number

Program PID number	Subscription and Support PID number
5655-w92	5655-U94
5655-w94	5655-S20

Offering Information

Product information is available via the Offering Information website

<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.

Title	Order number
InfoSphere optim pureQuery Runtime for Z/OS v3.2 (5655-w92)	
License Information	GC19-3423
Program Directory	GI10-8906
International Prog License	Z125-3301

Specified operating environment

Hardware requirements

For detailed hardware and software requirements, refer to the following support pages.

InfoSphere Optim Query Workload Tuner for DB2 z/OS V3.2

<http://www-01.ibm.com/support/docview.wss?uid=swg27036561>

IBM InfoSphere Optim pureQuery Runtime for z/OS V3.2

<http://www-01.ibm.com/support/docview.wss?uid=swg27022224>

IBM Data Studio V3.2

<http://www-01.ibm.com/support/docview.wss?rs=3360&uid=swg27016018>

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

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.

Packaging

IBM InfoSphere Optim Query Workload Tuner for DB2 for z/OS V3.2

- IBM InfoSphere Optim Query Workload Tuner for DB2 for z/OS V3.2 - Quick Start Guide for Multiplatforms (multilingual) CD
- IBM InfoSphere Optim Query Workload Tuner for DB2 for z/OS V3.2 - for Windows™ Operating Systems DVD
- IBM InfoSphere Optim Query Workload Tuner for DB2 for z/OS V3.2 - for Linux™ 32 Bit Operating Systems DVD
- IBM InfoSphere Optim Query Workload Tuner for DB2 for z/OS V3.2 - for Linux 64 Bit Operating Systems DVD

InfoSphere Optim pureQuery Runtime for z/OS , V3.2

- IBM InfoSphere Optim pureQuery Runtime for z/OS , V3.2 - 3590 Cartridge
- Hardcopy license document - Form number GC19-3423
- Hardcopy program directory - Form number GI10-8906

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.

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 InfoSphere Optim pureQuery Runtime for Z/OS V3.2	5655-w92	Value unit
IBM InfoSphere Optim Query Workload Tuner for DB2 for z/OS	5655-w94	Value unit

Resource Value Unit (RVU)

RVU is a unit of measure by which the program can be licensed. RVU Proofs of Entitlement (PoEs) are based on the number of units of a specific resource used or managed by the program. Licensee must obtain sufficient entitlements for the number of RVUs required for licensee's environment for the specific resources as specified in the program specific table. RVU entitlements are specific to the program and the type of resource and may not be exchanged, interchanged, or aggregated with RVU entitlements of another program or resource. Refer to the program specific RVU table.

Notes :

- Some programs may require licenses for the resources available to **and** the resources being managed by the program. In that case, the following applies. In addition to the entitlements required for the resources used by the program directly, licensee must obtain entitlements for this program sufficient to cover the resources managed by the program.
- Some programs may be licensed on a managed basis **only** . In that case, the following applies. Instead of the entitlements required for the resources used by the program directly, licensee must obtain entitlements for this program sufficient to cover the resources managed by the program.

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

Program number	Program name	Value Unit exhibit
5655-w92	IBM InfoSphere Optim pureQuery Runtime for z/OS V3.2	VUE007
5655-w94	IBM InfoSphere purgeQuery workload Tuner for DB2 for z/OS V3.2	VUE007

For each System z 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 System z 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

	MSUS minimum	MSUS maximum	Value Units/MSU
Base	1	3	1
Tier A	4	45	0.45
Tier B	46	175	0.36
Tier C	176	315	0.27
Tier D	316	+	0.2

Value Units for mainframes without MSU ratings:

Hardware	Value Units/machine
MP3000 H30	6
MP3000 H50	8
MP3000 H70	12
ESL models	2

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 System z IPLA product, the applicable Value Units would be:

Translation from MSUs to value Units

	MSUS	*	Value Units/MSU	=	value Units
Base	3	*	1.00	=	3.00
Tier A	42	*	.45	=	18.90
Tier B	130	*	.36	=	46.80
Tier C	140	*	.27	=	37.80
Tier D	1,185	*	.20	=	237.00
Total	1,500				343.50

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 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 US and several countries in Europe. In countries where ShopzSeries is not available yet, contact your IBM representative (or IBM Business Partner) to handle your order via the traditional IBM ordering process. For more details and availability, visit the ShopzSeries website at

<http://www14.software.ibm.com/webapp/ShopzSeries/ShopzSeries.jsp>

Basic license

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.

Program name: IBM InfoSphere Optim pureQuery Runtime for z/OS v3.2
 Program PID: 5655-W92

Entitlement identifier	Description	License option/ Pricing metric
S016PX1	IBM Optim pureQuery Runtime for z/OS	Basic OTC, Per MSU-day TUC

Program name: IBM Optim Query workload Tuner for DB2 for z/OS V3.2
Program PID: 5655-w94

Entitlement identifier	Description	License option/ Pricing metric
S016PWN	DB2 Query Workload Tuner for DB2 for z/OS	Basic OTC, Per MSU-day TUC

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.

Program name: IBM InfoSphere Optim pureQuery Runtime for z/OS V3.2
Program PID: 5655-w92

Entitlement identifier	Description	License option/ Pricing metric
S016PX1	IBM Optim pureQuery Runtime for z/OS	Basic OTC, per value unit Basic OTC, per MSU-day TUC
Orderable supply ID	Language	Distribution medium
S016PX0	English	3590 tape

Program name: IBM InfoSphere Optim Query workload Tuner for DB2 for z/OS V3.2
Program PID: 5655-w94

Entitlement identifier	Description	License option/ Pricing metric
S016PWN	IBM Optim Query Workload Tuner	Basic OTC, Value Units Basic OTC, per MSU-day TUC
Orderable supply ID	Language	Distribution medium
S016PWL	US English	3590 Tape Cartridge

Subscription and Support PID: 5655-U94

Entitlement identifier	Description	License option/ Pricing metric
S0151SH	IBM Optim pureQuery Runtime for z/OS	Basic ASC, per value unit SW S&S No charge, decline SW S&S Per MSU SW S&S registration
Orderable supply ID	Language	Distribution medium
S0151ZP	English	Hardcopy pub

Subscription and Support PID: 5655-S20

Entitlement identifier	Description	License option/ Pricing metric
S013K21	IBM Optim Query workload Tuner for DB2 for z/OS	Basic ASC, per value unit SW S&S No charge, decline SW S&S Per MSU SW S&S Registration
Orderable supply ID	Language	Distribution medium
S013K22	English	Hardcopy publication

Subscription and Support

To receive voice technical support via telephone 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) referenced above 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 Software Maintenance (IAASM). This offering:

- Includes and extends the support services provided in the base support to include technical support via telephone.
- Entitles you to future releases and versions, at no additional charge. Note that you are not entitled to new products.

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

The combined effect of the IPLA license and the Agreement for Acquisition of Software Maintenance gives you rights and support services comparable to those under the traditional ICA S/390® and System z license or its equivalent. To ensure that you continue to enjoy the level of support you are used to in the ICA business model, you must order **both** the license for the program **and** the support for the selected programs at the same Value Unit quantities.

Single version charging

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

Customized Offerings

Product deliverables are shipped only via CBPDO, ServerPac, SystemPac® .

CBPDO and ServerPac are offered for Internet delivery in countries where ShopzSeries product ordering is available. Internet delivery reduces software delivery time and allows you to install software without the need to handle tapes. For more details on Internet delivery, refer to the ShopzSeries help information at

<http://www.software.ibm.com/ShopzSeries>

You choose the delivery method when you order the software. IBM recommends Internet delivery. In addition to Internet and DVD, the supported tape delivery options for CBPDO, ServerPac, and SystemPac , include:

- 3590
- 3592

Most products can be ordered in ServerPac and SystemPac the month following their availability on CBPDO. z/OS can be ordered via all three offerings at general availability. Production of software product orders will begin on the planned general availability date.

- CBPDO shipments will begin one week after general availability.
- ServerPac shipments will begin two weeks after general availability.
- SystemPac shipments will begin four weeks after general availability due to additional customization, and data input verification.

Terms and conditions

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

Licensing

IBM International Program License Agreement including the License Information document and Proof of Entitlement (PoE) govern your use of the program. PoEs are required for all authorized use.

Agreement for Acquisition of Software Maintenance

The following agreement applies for Software Subscription and Support (Software Maintenance) and does not require customer signatures:

- IBM Agreement for Acquisition of Software Maintenance (Z125-6011)

These programs are licensed under the IBM Program License Agreement (IPLA) and the associated Agreement for Acquisition of Software Maintenance, which provide for support with ongoing access to releases and versions of the program. These programs have a one-time license charge for use of the program and an annual renewable charge for the enhanced support that includes telephone assistance (voice support for defects during normal business hours), as well as access to updates, releases, and versions of the program as long as support is in effect.

IBM System z Operational Support Services - SoftwareXcel is an option if you desire added services.

License Information form number

GC19-3423.

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

<http://www.ibm.com/software/sla/sladb.nsf>

Limited warranty applies

Yes

Limited warranty

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

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

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

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

Program support

Enhanced support, called Subscription and Support, includes telephone assistance, as well as access to updates, releases, and versions of the program as long as support is in effect. You 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, you may obtain a refund of the amount you paid for it, if within 30 days of your invoice date you return the program and its PoE to the party from whom you obtained it. If you downloaded the program, you may contact the party from whom you acquired it for instructions on how to obtain the refund.

For clarification, note that for programs acquired under any of IBM's On/Off Capacity on Demand (On/Off CoD) software offerings, this term does not apply since these offerings apply to programs already acquired and in use by you.

Other terms**Volume orders (IVO)**

No

IBM International Passport Advantage Agreement**Passport Advantage applies**

No

Software Subscription and Support 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 Software Subscription and Support (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 offering, visit

<http://www.ibm.com/services/sl/products>

IBM Operational Support Services - SoftwareXcel

Yes

System i Software Maintenance applies

No

Variable charges apply

Yes

Educational allowance available

Yes. A 15% education allowance applies to qualified education institution customers.

Sub-capacity terms and conditions

For each System z 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 System z 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 System z IPLA program you selected, refer to the [Ordering information](#) section.

Program number	Program name	Terms	Parent, if applicable
5655-w94	IBM InfoSphere Optim Reference-Based Query workload Tuner for DB2 for z/OS V3.2		DB2 V8 (5625-DB2) DB2 V8 VUE (5697-N29) DB2 V9 (5635-DB2) DB2 V9 VUE (5697-P12) DB2 V10 (5605-DB2) DB2 V10 VUE (5697-P31)

Sub-capacity mainframes

In cases where sub-capacity is applicable, the following terms apply.

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

z/OS based: The required license capacity of a System z IPLA program with these terms equals the license capacity of z/OS on the machines where the System z IPLA program executes.

Reference based: The required license capacity of a System z 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 System z IPLA program with full machine based terms equals the MSU-rated capacity of the machines where the System z IPLA program executes.

For more information on mainframe MSU-rated capacities, refer to *The IBM System z Machines Exhibit*, Z125-3901, or visit the Mainframes section of the System z Exhibits website

<http://ibm.com/zseries/library/swpriceinfo/>

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

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

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

- Where MLC pricing is aggregated across the sysplex

Sub-capacity eligibility

To be eligible for sub-capacity charging on select System z 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 System z (or equivalent). On that machine:

- All instances of the OS/390® operating system must be migrated to the z/OS operating systems.
- Any licenses for the OS/390 operating system must be discontinued.
- All instances of the z/OS operating 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 System z Software Pricing website

<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 System z Workload License Charges (Z125-6516).
- The complete terms and conditions for sub-capacity EWLC are defined in the IBM Customer Agreement - Attachment for IBM System z 890 and 800 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 IBM System z9® and System z Programs Sub-Capacity Pricing* (Z125-6929). Once the amendment is signed, the terms in the amendment replace any and all previous System z IPLA sub-capacity terms and conditions.

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 System z IPLA program with these terms equals the MSU-rated capacity of the machines where the System z IPLA program executes.

For more information on mainframe MSU-rated capacities, visit

<http://www-1.ibm.com/servers/eserver/zseries/library/swpriceinfo/>

Reference based: The required license capacity of a System z 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.

Sub-capacity utilization determination

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

On/Off Capacity on Demand (CoD)

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Orderable supply ID	Language	Distribution medium

S016PX0 English 3590 tape

Program name: IBM InfoSphere Optim Query Workload Tuner for DB2 for
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Program PID: 5655-W94

Entitlement identifier	Description	License option/ Pricing metric
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Orderable supply ID	Language	Distribution medium
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