



# IBM DB2 and IBM InfoSphere offer new and enhanced tools

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## At a glance

Enhanced IBM® tools deliver:

- Application management
  - IBM DataQuant for z/OS® , V2.1 (5697-P46)
  - IBM DB2® Path Checker for z/OS , V4.2 (5697-Q01)
- Database administration
  - IBM DB2 Administration Solution Pack for z/OS , V2.1 (5697-DAQ)
  - IBM DB2 Administration Tool for z/OS , V11.1 (5655-DAT)
  - IBM DB2 Object Comparison Tool for z/OS , V11.1 (5655-DOC)
- Performance management
  - IBM DB2 Buffer Pool Analyzer for z/OS , V5.2 (5655-W35)
  - IBM DB2 Data Access Common Collector for z/OS , V1.1 (5639-OLC)
  - IBM DB2 Performance Solution Pack for z/OS , V1.2 (5655-E74)
  - IBM DB2 Query Monitor for z/OS , V3.2 (5655-V42)
  - IBM DB2 SQL Performance Analyzer for z/OS , V4.2 (5655-W60)
  - IBM Tivoli® OMEGAMON® XE for DB2 Performance Expert on z/OS , V5.2 (5655-W37)
  - IBM Tivoli OMEGAMON XE for DB2 Performance Monitor z/OS , V5.2 (5655-W38)
- Recovery management
  - IBM DB2 Log Analysis Tool for z/OS , V3.4 (5655-T56)
  - IBM InfoSphere® Optim™ Workload Replay for DB2 for z/OS , V2.1 (5655-O18)
- Utilities management
  - IBM DB2 Accessories Suite for z/OS , V3.1 (5697-Q04)
  - IBM DB2 Utilities Suite for z/OS , V11.1 (5655-W87)

## Overview

**IBM DataQuant for z/OS , V2.1 (5697-P46)** delivers the following enhancements:

- Self-service and BI/analytics reporting options for business users.

- Development tools for technical solution developers.
- Analysis, forecasting, reporting, and presentation capabilities to help users at all levels leverage data, find answers, make decisions, and communicate those decisions to the rest of their business.

**IBM DB2 Accessories Suite for z/OS , V3.1 (5697-Q04)** consists of three features, each bundling components designed to enhance your use of IBM DB2 for z/OS . This release includes the addition of and changes to the following components:

- Addition of IBM DB2 Accessories Suite for z/OS feature, in support for DB2 11 for z/OS , which contains new spatial functions
- Addition of JSON capability, which bundles necessary components that enable DB2 for z/OS to be used as a JSON document store
- Update to Data Studio 4.1, delivering health monitoring, single query tuning, and application development tools for DB2 for z/OS

**IBM DB2 Administration Solution Pack for z/OS , V2.1 (5697-DAQ)** delivers integrated administration management capabilities for DB2 for z/OS by combining the function from the following:

- DB2 Administration Tool for z/OS , V11.1 (5655-DAT)
- DB2 Object Comparison Tool for z/OS , V11.1 (5655-DOC)
- InfoSphere Optim Configuration Manager for DB2 for z/OS , V3.1 (5655-AA3)
- DB2 Table Editor for z/OS , V4.4 (5697-G65)

**IBM DB2 Administration Tool for z/OS , V11.1 (5655-DAT) and IBM DB2 Object Comparison Tool for z/OS , V11.1 (5655-DOC)** include the following enhancements:

- Exploitation of DB2 for z/OS , V11.1
- Ability to register changes to multiple targets
- Ability to drop columns
- Support for global variables
- Ability to alter limit keys online
- Ability to save the compare report for changes to indexes
- Ability to ignore changes to indexes
- Improved integrated product customization with IBM Tools Customizer for z/OS

Additionally, DB2 Administration Tool for z/OS , V11.1 provides support for the separately available IBM DB2 Analytics Accelerator.

**IBM DB2 Buffer Pool Analyzer for z/OS , V5.2 (5655-W35)** can aid in optimizing database performance by helping buffer pools function at high efficiency. DB2 Buffer Pool Analyzer makes it easier to tune your database and substantially boost its capacity, speed, and reliability, supporting your efforts to succeed in the information economy.

**IBM DB2 Data Access Common Collector for z/OS V1.1 (5639-OLC)** is a delivery vehicle for common collector technology leveraged across multiple IBM offerings. It is a prerequisite product for IBM DB2 Query Monitor for z/OS , V3.2 and later releases, IBM InfoSphere Guardium® S-TAP® for DB2 on z/OS , V9.1 and later releases, and IBM InfoSphere Optim Workload Replay for DB2 for z/OS V2.1, and later releases.

**IBM DB2 Log Analysis Tool for z/OS , V3.4 (5655-T56)** performs rich log analysis, recovery operations, auditing analysis, and replication to help protect your valuable data.

**IBM DB2 Path Checker for z/OS , V4.2 (5697-Q01)** offers information about potential access path changes before they occur and about changes that occur after a rebind. It also includes the following features:

- Identifies, analyzes, and documents potential access path changes in advance without initiating bind processing
- Quickly determines if a bind of a Database Request Module (DBRM) will result in an access path change
- Delivers information about potential access path changes before they occur and after a rebind
- Tests proposed or actual changes in plans
- Creates a report of changed and unchanged paths
- Optionally gives you cost estimates and DB2 catalog statistics for path changes
- Identifies unnecessary rebinds due to application changes that do not impact access path selection

IBM DB2 Path Checker for z/OS , V4.2 offers these new features and benefits:

- Integrated product customization with the separately available IBM Tools Customizer for z/OS
- Improvements in SQL statement content comparing and matching
- Exploitation of APREUSE on generated REBIND commands and APCOMPARE on generated REBIND commands
- Early warning of plans and packages last bound prior to DB2 9 for z/OS (noting auto rebind at run time)
- Exploitation of EXPLAIN PACKAGE
- Toleration of BIND/REBIND EXPLAIN(ONLY)

**IBM DB2 Performance Solution Pack for z/OS , V1.2 (5655-E74)** delivers integrated performance management for DB2 for z/OS by combining function from the following:

- Tivoli OMEGAMON XE for IBM DB2 Performance Expert on z/OS , V5.2 (5655-W37)
- DB2 Query Monitor for z/OS , V3.2 (5655-V42)
- DB2 SQL Performance Analyzer for z/OS , V4.2 (5655-W60)
- InfoSphere Optim Query Workload Tuner for DB2 for z/OS , V4.1 (5655-AA4)

**IBM DB2 Query Monitor for z/OS , V3.2 (5655-V42)** offers current and historical views of query activity throughout DB2 subsystems. It gives you the ability to efficiently customize and tune your SQL workload and DB2 objects to validate the effectiveness of your DB2 subsystems and improve overall performance. It also offers you extensive choices so you can determine what monitoring information you will gather, and when.

DB2 Query Monitor for z/OS enables you to identify problem SQL activity and applications, allowing you to focus your efforts on improvement. DB2 Query Monitor for z/OS enables you to do the following:

- Proactively manage DB2 resources
- React quickly and effectively to supply and demand-related DB2 problems (such as those resulting from inefficient SQL or inadequate object structures)
- Identify SQL requests that prevent critical requests from completing on schedule

**IBM DB2 SQL Performance Analyzer for z/OS , V4.2 (5655-W60)** helps you analyze and tune your SQL queries by:

- Producing and interpreting cost reports
- Extensively analyzing SQL queries without running them
- Tuning queries to help achieve improved performance
- Using the Easy Explain function to better understand access path selection
- Diagnosing SQL query problems to facilitate prompt recovery

**DB2 SQL Performance Analyzer for z/OS , V4.2** offers the following enhancements:

- Customization enhancements for better ease of use.
- User-level parameters to override the customization parameters. This enables each user to have a copy of the user parameters so that they can modify the parameters only effecting their own userid and session. Also, users can have persistent parameter settings for SQL PA across sessions.
- Virtual Index enables you to create virtual indexes for doing what-if analysis. Virtual indexes typically have minimal impact on performance and overhead.
- Exploitation of DB2 11 for z/OS .

**IBM DB2 Utilities Suite for z/OS , V11.1 (5655-W87)** includes the following benefits:

- Supports all major new functions and structural changes in the IBM DB2 11 for z/OS product
- Delivers improved application and data availability
- Offers better performance and reduced resource consumption including additional zIIP exploitation
- Delivers simplified data management and improved usability

**IBM Tivoli OMEGAMON XE for DB2 Performance Expert on z/OS , V5.2 (5655-W37)** offers:

- Expert performance and availability monitoring support for DB2 11 for z/OS including exploitation of the new DB2 11 for z/OS monitoring instrumentation
- Expert monitoring support includes end-to-end SQL monitoring via the Extended Insight web console as well as expert stored procedure monitoring, buffer pool analysis, rules of thumb and expert advice
- Customer enhancements including expanded support for the IBM DB2 Analytics Accelerator
- Reductions to the total cost of ownership

**IBM Tivoli OMEGAMON XE for DB2 Performance Monitor on z/OS , V5.2 (5655-W38)** offers:

- Performance and availability monitoring support for DB2 11 for z/OS including exploitation of the new DB2 11 for z/OS monitoring instrumentation
- Customer enhancements including expanded support for the IBM DB2 Analytics Accelerator
- Reductions to the total cost of ownership

**IBM InfoSphere Optim Workload Replay for DB2 for z/OS , V2.1 (5655-O18)**

offers new enhancements to a solution that helps enterprises deploy infrastructure changes with confidence, on time, and within budget. InfoSphere Optim Workload Replay for z/OS is designed to deliver realistic and repeatable workload testing, helping to minimize risk in production environments, and reduce time and effort involved in creating realistic tests.

Key enhancements in this release include:

- Expanded coverage of DB2 for z/OS support, z/OS versions, and more
- Enhanced usability
- Enhanced scalability and performance

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## Key prerequisites

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Refer to the [Hardware requirements](#) and [Software requirements](#) sections for key prerequisites.

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## Planned availability date

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- October 25, 2013:
  - DataQuant for z/OS , V2.1 (5697-P46)
  - DB2 Administration Tool for z/OS , V11.1 (5655-DAT)
  - DB2 Buffer Pool Analyzer for z/OS , V5.2 (5655-W35)
  - DB2 Data Access Common Collector for z/OS , V1.1 (5639-OLC)
  - DB2 Log Analysis Tool for z/OS , V3.4 (5655-T56)
  - DB2 Object Comparison Tool for z/OS , V11.1 (5655-DOC)
  - DB2 Path Checker for z/OS , V4.2 (5697-Q01)
  - DB2 Query Monitor for z/OS , V3.2 (5655-V42)
  - DB2 SQL Performance Analyzer for z/OS , V4.2 (5655-W60)
  - DB2 Utilities Suite for z/OS , V11.1 (5655-W87)
  - Tivoli OMEGAMON XE for DB2 Performance Expert on z/OS , V5.2 (5655-W37)
  - Tivoli OMEGAMON XE for DB2 Performance Monitor on z/OS , V5.2 (5655-W38)
  - InfoSphere Optim Workload Replay for DB2 for z/OS , V2.1 (5655-O18)
- December 6, 2013:
  - DB2 Accessories Suite for z/OS , V3.1 (5697-Q04)
  - DB2 Administration Solution Pack for z/OS , V2.1 (5697-DAQ)
  - DB2 Performance Solution Pack for z/OS , V1.2 (5655-E74)

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## Description

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**IBM DataQuant for z/OS , V2.1 (5697-P46)** delivers:

- Ad hoc reports now enables you to drag and drop DataQuant queries onto an open canvas in runtime mode and select from a series of display options (charts or tabular presentations). You can now quickly and easily create your own sophisticated reporting objects. It can increase productivity and ease of use for all users, especially those who are new to DataQuant.
- Visual Applications enables concurrent development on dashboards and integrates ad hoc report functionality into the dashboard.
- With the new Text Analytics you can extract entities from unstructured data sources (either file-based or database-based) and display the results graphically. This function can recognize entities such as people, products, places, and organizations as well as the connections between them. It can be configured to recognize enterprise-specific vocabulary and extracts key data from contracts, support records, field notes, and comments, giving the user insight into sources beyond typical structured information. This feature is currently available only in the DataQuant for Workstation.
- Scheduled Tasks. Users have more options for the scheduled objects beyond the procedures that could be scheduled previously. Queries, quick reports, and visual reports can now be scheduled as well. This new feature gives you enhanced ability to schedule objects to run based upon user criteria, thus creating an autonomic approach to running DataQuant objects. In addition, a wide variety of actions to take with these objects are now available.
- With quick reports you can create a new type of grid-based GUI report with grouping, aggregation, charts, titles, fonts, and standard text formatting, giving you a simple, prompted approach to DataQuant report creation.
- New dynamarts enable you to save result sets with the query object. DataQuant dashboards and reports can be partially or fully driven by offline or scheduled data sets. Users can then send a snapshot of the result set and associated report to others so that they can "see it as it was" or refresh it to "see it as it is." Dynamarts enable users greater flexibility to share and access DataQuant dashboards and reports.

- Existing DataQuant queries, procedures, forms, visual reports, dashboards, forecasts, drill-down paths, analytical queries, and other objects and infrastructure are supported with no migration.

### **IBM DB2 Accessories Suite for z/OS , V3.1 (5697-Q04) .**

The new DB2 Accessories Suite for DB2 V11 feature supports the following new spatial functions for DB2 for z/OS :

- DB2GSE.ST\_Is3D
- DB2GSE.ST\_IsMeasured
- DB2GSE.ST\_IsValid
- DB2GSE.ST\_WKBTtoSQL
- DB2GSE.ST\_WKTTtoSQL
- DB2GSE.ST\_GeomFromText
- DB2GSE.ST\_GeomFromWKB
- DB2GSE.ST\_Perimeter

It has also been enhanced with IBM Data Studio V4.1.

The Data Studio V4.1 includes the following development capabilities:

- Java™ and native stored procedure development, deployment, and debugging
- Enhanced Java development to reinforce good SQL coding performance practices during development

The Data Studio query tuning features include:

- Ability to access plan graphs for visual diagnosis of problematic queries
- Single query stats advisor
- Export of diagnostic information to IBM service
- Ability to capture SQL for tuning from sources such as dynamic statement cache, DB2 catalog, IBM Tivoli OMEGAMON XE for DB2 Performance Expert on z/OS , DB2 Path Checker for z/OS , and the DB2 Query Monitor for z/OS

Execution of SQL scripts in Data Studio V4.1 include the following enhancements:

- Script execution can now be stopped at user defined checkpoints.
- Execution can continue from any point or limited to highlighted blocks of code, all within the same transaction.
- The results of a script may now be evaluated at any point before it is committed.

Data Studio is the foundation for development and tuning. For even more performance and tuning capability, use it in conjunction with enhanced capabilities found in IBM InfoSphere Optim pureQuery™ Runtime for z/OS and InfoSphere Optim Query Workload Tuner for DB2 for z/OS . Based on Eclipse, Data Studio naturally works well with Rational® Developer for z (RDz) to offer even more productivity to the DBA and developer. Data Studio V4.1 gives developers many integration enhancements between RDz and Data Studio. They can now run SQL from a source editor by highlighting the SQL statement and selecting "Run SQL". The results are displayed in the SQL Results View. "Tune SQL" is also available in the source editors. It opens InfoSphere Optim Query Workload Tuner with the selected SQL. SQL in PL1, Cobol and C++ source is now displayed in a SQL Outline view. Users may now launch InfoSphere Optim Query Workload Tuner or Visual Explain from the SQL Outline view to tune the SQL. The SQL Outline shows the dependent tables and columns for each SQL statement, and users may jump from the SQL Outline to the editor directly by double-clicking on the SQL.

The DB2 Accessories Suite for DB2 V11 feature also continues to support Unicode and internationalization support for IBM Text Search Server for DB2 for z/OS .

The IBM DB2 Accessories Suite for DB2 V10 feature includes continued support for spatial data and Unicode and internationalization support for IBM Text Search, the IBM Installable Information Management Software for z/OS Solutions Information Center, and the addition of IBM Data Studio V4.1. This feature is also enhanced with necessary components to enable DB2 for z/OS to be used as a JSON document store. Included are the following JSON capabilities:

- A programming interface for Java applications to store, update and intelligently query JSON documents
- A command line processor for performing administration tasks and data access operations on JSON data
- A Wire Listener service that extends the support to other languages via an open source wire protocol for accessing JSON data.

The JSON capability is a driver-based solution that embraces the flexibility of the JSON data representation within the context of an RDBMS that includes well-known enterprise features and quality of service. With this offering, applications can manage JSON documents in DB2 for z/OS using a new application programming interface (API) which is designed after the MongoDB data model and query language. This API leverages available DB2 for z/OS capabilities to store, modify, and retrieve JSON documents. This allows existing DB2 administration skills, resources, and processes to be utilized for managing this new type of data in DB2 for z/OS .

Using JSON capability, users can interact with JSON data in the following ways:

- They can administer and interactively query JSON data using a command line shell.
- They can programmatically store and query data from Java programs using a driver for JSON supplied by IBM that enables them to connect to their JSON data through the same JDBC driver used for SQL access.
- They can use any driver that implements the MongoDB protocol. This enables them to access their JSON store from a variety of modern languages, including node.js, PHP, Python, and Ruby, as well as more traditional languages such as C, C++, and Perl.

The IBM Installable Information Management Software for z/OS IBM Information Center delivers a locally installable IBM Eclipse Help System framework and some topics that explain how to install, use, and obtain updates for this information center. You can install this information center on one or more Microsoft™ Windows™ XP or Windows 7 workstations or on an intranet server so that many users in your organization can rely on ready access to the product information for DB2 for z/OS . This capability may be very important to organizations that limit or prohibit direct access to the web. Even users who normally have web access can benefit from access to a locally installed information center; they can access the information anywhere they are (while traveling, for example), and they should benefit from faster search performance. The actual product information is shipped on the DB2 10 for z/OS Licensed Library Collection (LKST-7390) and the DB2 11 for z/OS Licensed Library Collection (LK5T-8882), and it can also be downloaded by using the update wizard in the installable information center. You can also download the information center framework from the web. The IBM Installable Information Management Software for z/OS Solutions Information Center might not be included with future updates of the DB2 Accessories Suite for z/OS .

The IBM DB2 Accessories Suite for DB2 V9 feature delivers continued support for spatial data and Unicode and internationalization support for IBM Text Search Server, the addition of IBM Data Studio V4.1, and updates for IBM Text Search for DB2 for z/OS .

**IBM DB2 Administration Solution Pack for z/OS , V2.1 (5697-DAQ)** offers features, functions, and processes that DBAs can use to more effectively and efficiently manage DB2 environments. Delivered capabilities can help DBAs to more easily complete tasks associated with object management, change management, application management, and configuration management.

DB2 Administration Solution Pack for z/OS is composed of the following tools:

IBM DB2 Administration Tool for z/OS enables you to manage the tasks that keep DB2 performing at peak levels. It offers a comprehensive set of functions that helps your DB2 personnel manage their DB2 environments efficiently and effectively, including:

- Providing in-depth catalog navigation by:
  - Displaying and interpreting objects in the DB2 catalog
  - Executing dynamic SQL statements
- Integration with other separately available IBM DB2 Tools to simplify the task process flow:
  - DB2 Table Editor
  - DB2 SQL Performance Analyzer
  - DB2 High Performance Unload
  - DB2 Cloning Tool
  - InfoSphere Optim Configuration Manager
- Adding summary reports that give an overview on complex data changes and data migration

IBM DB2 Object Comparison Tool for z/OS helps maximize system availability by keeping production and testing database environments running in parallel. It offers the following benefits:

- Simplifies the process of comparing objects and their dependents from different sources
- Synchronizes sources
- Consistently keeps production databases in step with those for testing and development

Enhancements in DB2 Administration Tool for z/OS , V11.1 and DB2 Object Comparison Tool for z/OS , V11.1:

- Exploitation of DB2 for z/OS , V11.1
- Ability to drop columns
- Support for global variables
- Ability to alter limit keys online
- Ability to register changes to multiple targets
- Ability to save the compare report for changes to indexes
- Ability to ignore changes to indexes
- Improved integrated product customization with IBM Tools Customizer for z/OS

In addition, DB2 Administration Tool for z/OS delivers support for IBM DB2 Analytics Accelerator.

IBM InfoSphere Optim Configuration Manager for DB2 for z/OS , V3.1 (5655-AA3) helps organizations gain a good understanding of their environment in the following ways:

- Building an inventory of clients and servers
- Tracking changes to client/server properties
- Comparing client/server environments with best practices configuration
- Generating an alert whenever configurations deviate
- Controlling clients by:
  - Remotely enforcing client properties
  - Throttling connections



- Redirecting connections in a non-datasharing environment
- Isolating workloads within a data sharing group for better management availability

InfoSphere Optim Configuration Manager for DB2 for z/OS , V3.1 helps organizations automatically monitor, manage, and track multiple database servers, including database objects, configuration parameters, BUFFERPOOLS, PTF levels, and Workload Manager policies, and more, for problem determination and building an inventory of clients for migration. Version 3.1 includes significant usability enhancements to the database and client comparison feature. Organizations can use a single simplified interface that supports mismatch in schema, table, or column names.

Using InfoSphere Optim Configuration Manager, users can enforce any application client and driver property or special register to match best practices established by the user. InfoSphere Optim Configuration Manager sends alerts when the configurations are out of sync. Poorly behaving application clients can be isolated within a DB2 for z/OS datasharing group in order to meet performance and availability objectives.

Application clients can be redirected from one DB2 for z/OS system (datasharing or non-datasharing) to another mirrored system for disaster recovery or high availability. WebSphere® Application Server clients can be redirected without recycling. These clients can also be remotely tuned after reviewing statistics graphs of connection pool usage in the tool.

InfoSphere Optim Configuration Manager uses the DB2 10 for z/OS Application Profiles feature to manage client properties at the server in addition to managing properties at the client. Users can more easily manage DB2 for z/OS administration by creating, starting, and stopping dynamic location aliases or by dynamically changing the ZPARMs. InfoSphere Optim Configuration Manager can be configured to enforce application client and driver properties dynamically to achieve workload balancing in DB2 for z/OS systems or to conform application clients to appropriate DB2 for z/OS Workload Manager service classes without requiring application changes or recycling.

IBM DB2 Table Editor for z/OS , V4.4 (5697-G65) is IBM's multipurpose table editing environment that offers database administrators, developers, and the entire enterprise, direct update and data creation operations on DB2 for z/OS databases from a Java , ISPF, or Windows-based user interfaces.

DB2 Table Editor helps you make the best use of your time by enabling quick and easy manipulation of data. It can help you reduce staff training time, can enhance database administrator (DBA) productivity, increases the ability to respond to your workforce's need for high-performance business applications, and enables the IT team to institute proactive database maintenance.

DB2 Table Editor makes quick and easy work of navigating IBM DB2 databases, tables, and views; finding related data; and updating, deleting, or creating data with support for your existing DB2 security and logon IDs. It delivers drag-and-drop functionality and wizards to rapidly create versatile, task-specific Java or Windows-based table editing forms with built-in data validation and business rules.

**IBM DB2 Administration Tool for z/OS , V11.1 (5655-DAT)** and **IBM DB2 Object Comparison Tool for z/OS , V11.1 (5655-DOC)** when used together, deliver 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 DB2 objects, and organize DB2 objects for better system throughput.

DB2 Administration Tool for z/OS enables the day-to-day tasks that are associated with managing a DB2 database, simplifying the complex tasks associated with safely managing DB2 objects and schema throughout the application lifecycle with the least possible impact to availability.

With DB2 Administration Tool for z/OS , you can:

- Allow users to navigate the DB2 catalog quickly and easily
- Build and execute dynamic SQL statements without knowing the exact SQL syntax
- Manage and track changes made to DB2 object definitions, resolving any potential conflicts prior to execution
- Help build DB2 commands to execute against databases and tables
- Enable users to create, alter, migrate, drop, and reverse engineer DB2 objects
- Build and execute utility jobs, allowing users to take advantage of LISTDEFS and TEMPLATES for increased productivity

DB2 Object Comparison Tool for z/OS helps you to compare and synchronize different DB2 objects while helping maintain system availability and object integrity.

DB2 Object Comparison Tool for z/OS provides users with:

- A GEN function which, in addition to extracting DDL, can also generate statements for the object authorizations and the catalog statistics
- A batch compare feature that compares two version files, produces reports describing any of the object differences, and generates the information needed to apply the changes
- Support for masking and ignore files, which address intentional differences or naming conventions, allowing you to deal with only net changes between objects

New enhancements to DB2 Administration Tool for z/OS and DB2 Object Comparison Tool for z/OS focus on registering changes to multiple targets, providing support for the separately available IBM DB2 Analytics Accelerator, comparing changes to indexes and saving the comparison reports, and exploiting new features in DB2 Version 11.

When using DB2 Administration Tool for z/OS with DB2 Object Comparison Tool for z/OS , you can use change management features, which include the ability to group multiple changes into one request, the ability to ignore and/or exclude changes found in the change process, and the ability to apply and manage changes to one or more target system.

Additionally, both DB2 Administration Tool for z/OS and DB2 Object Comparison Tool for z/OS can be customized using IBM Tools Customizer, a common component that simplifies the post-SMP/E installation customization tasks for many of the DB2 Tools.

**IBM DB2 Buffer Pool Analyzer for z/OS , V5.2 (5655-W35)** makes it easy to tune your database and substantially boost its capacity, speed, and reliability, which can help you succeed in the information economy.

**IBM DB2 Data Access Common Collector for z/OS , V1.1 (5639-OLC)** is a delivery vehicle for common collector technology leveraged across multiple IBM offerings. It is a prerequisite product for IBM DB2 Query Monitor for z/OS , V3.2 and later releases, IBM InfoSphere Guardium S-TAP for DB2 on z/OS , V9.1, and later releases, and IBM InfoSphere Optim Workload Replay for DB2 for z/OS V2.1, and later releases.

**DB2 Log Analysis Tool for z/OS , V3.4 (5655-T56)** is a powerful tool used to support efforts to maintain high data availability and complete control over data integrity. It enables you to monitor data changes by automatically building reports of changes that are made to database tables. DB2 Log Analysis performs the following tasks:

- Reporting:
  - View data changes by dates, users, tables, and other criteria
  - Create summary and detail reports that show:
    - Original state of the data

- Current state
- Other valuable information, such as who changed the data
- From this reporting, you can institute tighter controls over the data to ensure that it can no longer be compromised
- Recovery:
  - SQL generated to undo or redo changes recorded in the log
  - Support for dropped object recoveries.
  - Report on and recover data for dropped objects using both old and new DB2 identifiers
  - After DDL is recreated, restore the data in the regenerated table back to its state prior to the table being dropped
- Auditing:
  - Monitor and audit table activity
    - Update, insert, delete and much more
    - Determine who changed the data
    - Determine the sequence of the changes
  - Validating SQL activity without traces: Is my program doing what I expect?
  - Load reports into audit tables for review
- Replication:
  - Replay changes on another system or object: LOAD or REDO SQL
  - Used for data warehousing and internal processes
  - Used for setting up test systems: Use production data for authentic application testing

Version 3.4 includes the following enhancements:

DB2 11 for z/OS support:

- Seamless support of the extended RBA/LRSN introduced in DB2 11 for z/OS with no user action required, except when using product option "Load data into DB2 " and the header fields for RBA or LRSN when values have been included in any target tables, then those fields must be altered to allow for the larger values. The job to handle such DB2 ALTERs is included as part of customization.
- Remove column from a table instead of having to redefine the entire table with DB2 11 dropped column support.
- Reduce image copy tape mounts and overall I/O by supporting logged compression dictionaries when found for the log range that DB2 Log Analysis is processing.
- Automated DB2 11 for z/OS new function support for UNICODE columns in an EBCDIC table.

Performance improvements:

- zIIP exploitation<sup>1</sup> to reduce the cost of running log analysis features
  - Processing of memory intensive array searches on a zIIP can deliver CPU savings
  - Processing of 64 bit sorts can deliver CPU savings
- Reduce the need to mount image copies and use more efficient I/O by bypassing incremental image copy if not available.
- Exploit SYSIBM.SYSLGRNX table directly rather than incurring the overhead of using the REPORT utility ( DB2 10, and later).
- Simplify support and eliminate additional processing when the table versioning flag is set and all data being processed is not versioned.
- Increase performance by optionally using the QSAM access method versus the VSAM access method for the repository output (ROWDATA) in two phase mode only.

**1**

This information provides only general descriptions of the types and portions of workloads that are eligible for execution on Specialty Engines (SEs). IBM authorizes customers to use IBM SEs such as zIIPs, zAAPs, and IFLs only to execute the processing of Eligible Workloads of specific programs expressly authorized by IBM as specified in the Authorized Use Table for IBM Machines (AUT) provided at

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**Usability improvements:**

- Add flexibility by enabling an option to wait for DB2 resources (archive log files and image copies) that are in use instead of stopping processing.
- Reduce processing time and resources by filtering what SQL gets executed in Fast Apply SQL.
- Reduce manual processes by ISPF Selection lists without requiring the user to manually enter names or leave DB2 Log Analysis Tool for z/OS to find the correct information. Users can find and easily filter by tables, table spaces, columns, plans, and Auth IDs.
- Increase usability by externalizing four expert options in the LOAD step and adding a new option. The user can now set these options without editing JCL. An "Expert options" field has been added to the "Load data into DB2 " panel. This field allows the "LOAD expert options" panel to be edited by the user if any of the four preexisting expert options below are desired:
  - Bypass DEFAULTIF specification
  - Make the LRSN field a packed decimal
  - Make the table names fixed length
  - Pad any VARCHAR columns with spaces
  - Bypass NULLIF is the new option
- Increase flexibility by allowing specification of a minimum volume count when allocating the temporary image copy allocation, ICDD, data set to avoid out of space conditions.
- New reports and improvements:
  - Help customers identify when they are getting close to the RBA limit by predicting the amount of time to the high RBA/LRSN values and displaying them in a BSDS report.
  - Provide more granular auditing information in a new DB2 Catalog report. The report details what happened to the DB2 objects. This report shows information about GRANTS, REVOKEs, BINDs, FREEs; databases (CREATE, ALTER, DROP); table spaces (CREATE, ALTER, DROP); tables (CREATE, ALTER, DROP); indexes (CREATE, ALTER, DROP); views (CREATE, ALTER, DROP); procedures (CREATE, DROP); triggers (CREATE, DROP); roles (CREATE, DROP); and functions (CREATE, DROP). Each action also shows the timestamp when it occurred.
  - Flexibility in report creation by allowing the user to specify data set names for report output instead of having to edit the JCL to write the report to a user-created data set. The user will now be able to specify that the report should be written to a data set without manual intervention.
  - Improve the readability of the Details Report by optionally displaying VARCHAR data length immediately preceding the data. This is useful in determining how long the field is and whether or not it is padded with spaces.
  - Utility execution counts are now provided in the Details Summary Report (summary of the activity in the Details Report) for ease in migration. The counts include how many rows were inserted by the LOAD utility and how many rows were deleted by a mass delete operation.
  - Easily identify the maintenance level of each module through a new report. This report can be produced from the User Options Panel. It is also displayed in the INFOM DD during batch product execution.

- Reduce processing time by supporting log backward processing for a LOAD REPLACE utility that ran after the starting LOGPOINT of the analysis job if the following restrictions have been met:
  - Only full row images are present
  - No compression in use or KEEPDICTIONARY was used by the utility
  - Current row images are not requested.

Customization improvements:

- Easier product object definition by providing SET CURRENT SQLID statement, with the authority to create objects in each generated JCL step that creates a DB2 object. This field defaults to SESSION\_USER, so if no special ID is required, then no action is required.
- Reduce manual steps by providing an installation step that adds DB2 Log Analysis Tool for z/OS to the DB2 Administration Tool for z/OS Launchpad.

**IBM DB2 Path Checker for z/OS , V4.2 (5697-Q01)** includes these new capabilities:

- A new customization process that uses the IBM Tools Customizer for z/OS is supported. An ISPF user interface guides you through the customization process to assist in the initial customization and re-customization. This process discovers the previous customization of the product and completes the customization of the product JCL templates. This gives you the same consistent look and feel as the other DB2 Tools customization.
- The SQL statement matching has been improved. In addition to comparing to match "table name", "table number", and "statement type", an additional new MATCHSQL2 option matches based on the SQL statement content.
- When comparing plans or packages, a new option APCOMPARE(ERROR/WARN) can be specified with the use of TEST and COMPARE (PLAN or PACKAGE) commands. This option will cause APCOMPARE(...) to be added to generated BIND commands.
- When comparing plans or packages, a new option APREUSE(ERROR/WARN) can be specified with the use of TEST and COMPARE (PLAN or PACKAGE) commands. This option will cause APREUSE(...) to be added to generated BIND commands.
- Plans and packages bound prior to DB2 9 for z/OS are identified. A warning is issued that these plans and packages will automatically be rebound at the run time of DB2 11 for z/OS or later.
- A new option EXPLAIN PACKAGE includes the additional capability of retrieving the current path information that is populated in the specified plan table.
- During a COMPARE, additional capability is available to determine when BIND/REBIND EXPLAIN(ONLY) was used. When this is determined, the EXPLAIN PACKAGE command is used to retrieve the access path data.

**IBM DB2 Performance Solution Pack for z/OS , V1.2 (5655-E74)** offers features, functions, and processes that DBAs can use to more effectively identify, diagnose, and solve performance challenges across DB2 for z/OS environments, as well as help prevent them from reoccurring in the future. Key integration features within individual products, such as in-context launching of other tools, direct data import/export and so on, enable users to maintain problem solving context as they move from one tool to the next.

The DB2 Performance Solution Pack for z/OS is composed of the following tools:

- IBM Tivoli OMEGAMON XE for DB2 Performance Expert on z/OS enables users to assess the efficiency of DB2 and optimize its performance, combining sophisticated response time tracking, reporting, monitoring, stored procedure, and buffer pool analysis features, as well as expert database analysis functions.

It offers the following benefits:

- Delivers end-to-end response-time measurement capability for heterogeneous applications accessing DB2 for z/OS data through SQL or stored procedures

- Includes performance metrics about the separately available IBM DB2 Analytics Accelerator usage
- Monitors, analyzes, and tunes the performance of DB2 subsystems
- Improves productivity with robust views of performance
- Identifies performance bottlenecks quickly and easily by using predefined rules
- Offers substantial breadth and depth of monitoring DB2 environments by combining batch reporting capabilities with real-time monitoring and historical tracking functions
- Supports an enterprise-wide integrated systems management strategy activated by the Tivoli OMEGAMON XE family
- Stores performance data and analysis tools in a performance warehouse
- DB2 Query Monitor for z/OS enables users to identify problem SQL activity and includes robust statistics for SQL tuning. It can work with InfoSphere Optim Query Workload Tuner for DB2 for z/OS and DB2 SQL Performance Analyzer for z/OS to enable users to customize and tune the poorly performing SQL statement or workload and to support the effectiveness of DB2 subsystems and improve overall performance.
  - Monitors SQL activities and delivers automatic alerts to exceptional events on a monitored DB2 subsystem in real time
  - Monitors DB2 commands, host variables, and SQL CA and SQL code in real time
  - Includes user-friendly ISPF, GUI, and web interfaces with SQL statistics of multiple DB2 subsystems
  - Integrates with other DB2 Tools to reduce resource consumption
  - Supports single sign-on for the ISPF view of data sharing group
- DB2 SQL Performance Analyzer for z/OS gives DBAs and application developers the ability to do extensive analysis of SQL queries without executing them. This analysis aids users in tuning queries to achieve maximum performance. It can also help reduce the escalating costs of database queries by estimating their cost prior to execution. Candidate queries can be passed from both DB2 Query Monitor for z/OS and Tivoli OMEGAMON XE for DB2 Performance Expert on z/OS to facilitate the analysis of a problem query once identified.
  - Performs performance analysis and recommendations for DB2 plans, packages, DBRMs, and SQL without executing them
  - Includes several interfaces: Batch, ISPF, and QMF™
  - Offers what if scenarios to help determine the performance for various database design alternatives
  - Generates comprehensive and easy-to-use performance reports to assist in analysis
  - Analyzes economic cost for each query statement
- Enhanced interface to DB2 Query Monitor for z/OS accepts either a DDNAME or a DSNNAME when DB2 SQL Performance Analyzer for z/OS is called.
- InfoSphere Optim Query Workload Tuner for DB2 for z/OS empowers users to more efficiently manage performance by proactively optimizing the performance of SQL queries and query workloads. InfoSphere Optim Query Workload Tuner for DB2 for z/OS makes it easy to access candidate queries and define workloads from a number of common sources. It is integrated with other separately available DB2 Tools, such as DB2 Query Monitor for z/OS and Tivoli OMEGAMON XE for DB2 Performance Expert on z/OS to enable a more complete solution for monitoring and tuning SQL. This integration helps organizations reduce the risk of customer complaints, missed SLAs, and financial losses due to performance problems.
  - Analyzes SQL queries and workloads to proactively optimize physical database design and improve performance
  - Helps to proactively solve query performance problems by enabling faster and deeper analysis of queries
  - Offers expert recommendations to help maximize application performance while reducing specialized skill requirements

- Helps reduce the total cost of ownership for DB2 for z/OS
- Reduces CPU usage for statistics collection by collecting only what is helpful to improve performance
- Tunes queries holistically with integration with other separately available DB2 performance tools

**IBM DB2 Query Monitor for z/OS , V3.2 (5655-V42)** delivers performance improvements, improved product integration, better ease of use, and improved reliability, availability, and serviceability.

Performance improvements are obtained by reducing the collection overhead for fetch-intensive workloads, by expanded zIIP exploitation, and by implementing literal stripping for dynamic SQL text collection.

Product integration advancements focusing on DB2 11 for z/OS exploitation and support for the separately available DB2 Analytics Accelerator. DB2 Query Monitor for z/OS V3.2 supports DB2 11 for z/OS . It also gives you the ability to identify accelerated queries, enabling key metrics and statistics, showcasing the return on investment for IBM DB2 Analytics Accelerator. In addition, DB2 Query Monitor for z/OS V3.2 offers enhanced integration with InfoSphere Optim Query Workload Tuner for DB2 for z/OS , giving you better end-to-end tuning for SQL queries and workloads.

Ease-of-use improvements deliver additional value through enhanced productivity.

DB2 Query Monitor for z/OS V3.2 supports IBM Tools Customizer for z/OS , giving you a guided customization. DB2 Query Monitor for z/OS V3.2 also offers user interface improvements including displaying additional statistics on the Object Details Panel, enabling workload comparisons to track query performance over time, and enabling monitoring profiles to be changed via an operator command. The SQL Text offload program is replaced with the DB2 LOAD utility for ease of use and simplification of the process.

IBM DB2 Query Monitor for z/OS V3.2 includes the following new features:

- Additional zIIP enablement<sup>1</sup> :
  - zIIP frees up general computing capacity and lowers the overall total cost of computing for select data and transaction processing workloads. By running more DB2 Query Monitor for z/OS processing on zIIP processors, the overall cost of SQL monitoring can be lowered.
  - With the base 3.2 delivery, DB2 Query Monitor for z/OS exploits zIIP processors for storage clean-up activity and the collection of current activity (where "current activity" is the statistical data collected by having the INFLIGHT(Y) parameter set at startup)<sup>1</sup>

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- Performance improvements for fetch-intensive workloads:
  - Increase performance of DB2 Query Monitor for z/OS collector code path.
  - Optimize for FETCH calls.

- Literal stripping:

This enhancement enables users to specify OPTKEYS(PTEXT) to strip literals and multiple whitespaces from summary text.

- **Additional delay statistics on objects panel:**  
The Object Detail panel now includes statistics describing lock or latch delays, page latch delays and synchronous I/O delays. This enables you to sort on any of these delay counters and detect which object is having which type of delay problem.
- **New modify commands:**  
Additional modify commands have been added to enable you to automate the process of changing the monitoring profile. The new modify commands enable you to activate and deactivate monitoring agents as well as to change and refresh monitoring profiles.
- **Workload comparisons:**  
In summaries perspective, you can specify one workload as a baseline workload and then navigate to another workload (the current workload) to compare it to the baseline. This enables you to detect and analyze many kinds of changes in workload performance metrics.
- **Sharing user configurations:**  
User configurations can be created for filters, archive connections and staging table connections. These user configurations can be shared with other users and you can control the way the user configurations are shared through the use of labels.
- **Export Activity Browser data:**  
DB2 Query Monitor for z/OS CAE users can download data in the current Activity Browser display in either CSV or PDF format using the Tools > Export Data option. CSV format files can be opened in a spreadsheet for further analysis.
- **Load utility support for offload:**  
This enhancement replaces the CQM@ITXT module with the DB2 load utility. This creates faster loading of SQLTEXT, and is less problematic for the user. Internal changes enable the DB2 load utility to load the SQLTEXT into appropriate SQLTEXT tables for SQL statements less than 32K bytes in length. For SQL statements greater than 32K bytes in length, the COM@ITXT module is still used.
- **DB2 Query Monitor V3.2 exploits DB2 11 for z/OS .**
- **Support for customization:**  
Offers a new customization method for easier configuration. This method invokes the IBM Tools Customizer for z/OS , simplifying and consolidating many of the customization processes that are required to customize IBM Tools.
- **Add interval number to interval started/ended messages**
- **New batch reports: DB2 Query Monitor for z/OS Batch Reports are enhanced in V3.2.** The new batch reports are derived from queries and forms developed in IBM Query Management Facility™ ( QMF ). While the new batch reports offer the same information and report layout as the batch reports delivered in IBM DB2 Query Monitor V3.1, they are now delivered in a manner that enables you to use them as a base for your own customized batch reports.
- **Ability to define CAE actions that launch web pages:**  
Users can now define actions that can be executed in the CAE web client to take users to specific web pages.
- **Averages based on execution accounts:**  
Previously, averages in IBM DB2 Query Monitor for z/OS were calculated based on the number of SQL calls. Three new columns have been added: AvgX Elapsed, AvgX CPU, and AvgX Delays. These new columns use the execution accounts to calculate the averages.

**IBM DB2 SQL Performance Analyzer for z/OS , V4.2 (5655-W60)** delivers an extensive analysis of SQL queries without executing them. This analysis aids you in



tuning your queries to achieve maximum performance. The functional, usability, and reporting enhancements include:

- Customization enhancements for better ease of use with Tools Customizer for z/OS :
  - A more intuitive categorization of the customization parameters
  - Customization support for specifying DB2 objects be created in UNICODE
  - Customization support for JES3
  - Customization support to enable users to specify the volume to be used for the dynamic allocation of data sets
- Key functional enhancements:
  - Enable users to display existing reports without performing another EXPLAIN. This saves time and the processor costs of performing the associated EXPLAINS.
  - Additional new statistics to migration process so that the chosen access paths will match on both systems that are used in the migration.
  - Merge EEE parameters with the user parameters. This simplifies the management of parameters by consolidating the parameter files.
  - Enable users to override installation-level parameters by creating their own user-level user parameter files. This also supports the use of these same user-level parameters for each session of SQL PA. In addition, it supports users having their own job cards saved.
  - With the use of APPLID, product profile variables integration with other products is improved. The migration of existing profile variables is transparent to the user.
  - Include a virtual index feature/function for what-if analysis. This enables you to create virtual indexes for doing what-if-analysis. With virtual indexes, there is typically minimal impact on performance and less overhead.
- Exploitation of new DB2 11 for z/OS features.

**IBM DB2 Utilities Suite for z/OS , V11.1 (5655-W87)** delivers the following features and benefits:

- REORG utility enhancements:
  - Outage reduction for online REORG through improved drain processing and SWITCH phase elapsed time reduction
  - Better control of SWITCH phase timing
  - Online rebalance of data across partitions
  - Automated REORG mapping table management
  - Intelligent default settings for REORG
  - Better PBG management through deletion of unused partitions
  - Improved data set management with partition-level inline image copies
  - Improved performance of partition-level REORG with non-partitioned secondary indexes
  - Ability to REORG without sorting of the data
  - Improved REORG LISTDEF processing
  - Enhanced inline statistics for RUNSTATS avoidance
  - Percentage of free space in the data specified
- LOAD and UNLOAD utility enhancements:
  - Parallel processing for LOAD with a single input data set.
  - Cross-loader support for XML data.
  - Processing of LOAD REPLACE PART clearing of nonpartitioned secondary indexes can be executed on a zIIP(1).
  - Enhanced inline statistics for RUNSTATS avoidance.
  - Percentage of free space in the data specified with LOAD.

- COPY utility enhancements:
  - Permit COPY to run concurrently with long-running REORGs for improved recoverability
- RECOVER utility enhancements:
  - Many restrictions lifted on point-in-time data recovery for online schema changes
  - Faster catalog and directory recovery with enhanced SYSLGRNX recording
- RESTORE SYSTEM utility enhancements:
  - Support for VCAT name translation for system cloning
- RUNSTATS utility enhancements:
  - Certain utilities processing in RUNSTATS, REORG, and LOAD now run under an enclave SRB and are therefore eligible for zIIP processing<sup>1</sup>
  - Enhanced statistics profile support.
  - Enhanced inline statistics capability.
  - Optimizer input to RUNSTATS.
  - New option to reset existing statistics.
- TEMPLATE utility enhancements:
  - Support for allocating data sets with large format, extended format, or extended attributes
  - Choice of local time in data set names
- Overall utility enhancements:
  - Greater parallelism control for LOAD, REORG, REBUILD INDEX, UNLOAD, CHECK INDEX
  - Enhanced DISPLAY UTILITY command output shows job name and start timestamp
  - Reduced utility impact on DB2 bufferpools for UNLOAD, REORG TABLESPACE, RUNSTATS TABLESPACE, RUNSTATS INDEX, REBUILD INDEX, CHECK INDEX, CHECK DATA
  - Improved data set clean up in utility stored procedures

## 1

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## **IBM Tivoli OMEGAMON XE for DB2 Performance Expert on z/OS , V5.2 (5655-W37) and IBM Tivoli OMEGAMON XE for DB2 Performance Monitor on z/OS , V5.2 (5655-W38) deliver:**

- Support for DB2 11 including:
  - Storage accounting enhancements
  - RBA/LRSN expansion
  - Autonomous SQL procedures
  - New and enhanced ZPARMs
  - Enhanced client information fields
  - New and enhanced statistics for session, array variables and stored procedures
- Support for RID list enhancements
- Restore rundate and jobname to utility screens - previously lost functionality due to internal DB2 changes

- Further below the bar memory reductions
- Deferred start capability for Application Trace (ATF). This feature is the remaining CUA-unique capability in OMEGAMON DB2 being implemented in preparation for full deprecation of the CUA
- DB2 security usage to issue DB2 commands in the enhanced 3270 UI, making it more intuitive for DBAs and DB2 users than the previously used session ID used to log on to the enhanced 3270 UI
- Performance database schema improvements
- Group Global Buffer Pool support added to the enhanced 3270 UI and classic
- Updated batch and real-time support for the IBM DB2 Analytics Accelerator
- New DB2 10 IFCID 225 ( DB2 storage) metrics that enhances OMEGAMON DB2 storage displays to account for continued migration of DB2 storage to above the bar
- Spreadsheet input generator
- Aggregated accounting statistics
- DB2 locks and claims by plan
- The four-char CICS® TransID is now available for active threads
- Various customer requirements
- Integration with other separately available DB2 Tools to explain and tune SQL statements or access additional SQL workload related information
  - DB2 SQL Performance Analyzer for z/OS V4.2
  - InfoSphere Optim Query Workload Tuner for DB2 for z/OS and IBM Data Studio V4
  - InfoSphere Optim pureQuery Runtime for DB2 for z/OS V3
  - WebSphere Application Server V6.1.0.27, or later

The **InfoSphere Optim Workload Replay for DB2 for z/OS , V2.1 (5655-018)** solution is a product offering that works with DB2 on z/OS that helps enterprises minimize disruption to the business and can dramatically decrease the cost and time to deploy infrastructure changes. Common uses of this product include:

- Migrations to new versions of DB2 for z/OS
- Upgrades and patches to operating systems or applications
- Help with managing increased workload such as additional users, increased data, or application tasks
- Performance validation and tuning

This solution includes features designed to:

- Capture real local and DRDA® workloads needed for real-life simulation, including capture from multiple data-sharing members
- Replay the workload to reproduce the original application timing, order of execution, transaction boundaries, isolation levels, and other SQL and application characteristics
- Review change impact using comparison reports, including the most time-consuming statements and transactions
- Use for regression testing, functional testing, system testing, end-to-end transaction testing, patch release testing, component testing, performance testing, and problem diagnosis

InfoSphere Optim Workload Replay for DB2 for z/OS V2.1 includes the following new functions and features:

- Increased coverage:
  - Support for DB2 11 for z/OS
  - Support for Guardium v9.x
- Enhanced usability:

- Enhanced UI to organize and find workloads by area as defined by the project teams
- Ability to export and import workloads from one InfoSphere Optim Workload Replay for z/OS server to another to create easier deployment across the enterprise. This feature is useful when production and test systems reside in different geographical locations or on different LAN/WAN segments while still allowing ability to test with realistic workloads.
- For applications using LOB/XML, enhanced LOB/XML support.
- Enhanced scalability and performance: Increased support of high-end workloads and reduced overhead.

InfoSphere Optim Workload Replay for z/OS is designed to deliver realistic and repeatable testing capabilities, helping to minimize risk in production environments, and reduce time and effort involved in creating realistic tests.

### **Accessibility by people with disabilities**

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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](http://www.ibm.com/able/product_accessibility/index.html)

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### **Program number**

Program number	VRM	Program name
5697-P46	2.1.0	IBM DataQuant for z/OS
5697-Q04	3.1.0	IBM DB2 Accessories Suite for z/OS
5697-DAQ	2.1.0	IBM DB2 Administration Solution Pack for z/OS
5655-DAT	11.1.0	IBM DB2 Administration Tool for z/OS
5655-W35	5.2.0	IBM DB2 Buffer Pool Analyzer for z/OS
5639-OLC	1.1.0	IBM DB2 Data Access Common Collector for z/OS
5639-OLD	1.1.0	IBM DB2 Data Access Common Collector for z/OS Subscription and Support
5655-T56	3.4.0	IBM DB2 Log Analysis Tool for z/OS
5655-DOC	11.1.0	IBM DB2 Object Comparison Tool for z/OS
5697-Q01	4.2.0	IBM DB2 Path Checker for z/OS
5655-E74	1.2.0	IBM DB2 Performance Solution Pack for z/OS
5655-V42	3.2.0	IBM DB2 Query Monitor for z/OS
5655-W60	4.2.0	IBM DB2 SQL Performance Analyzer for z/OS
5655-W87	11.1.0	IBM DB2 Utilities Suite for z/OS
5655-W37	5.2.0	IBM Tivoli OMEGAMON XE for DB2 Performance Expert on z/OS
5655-W38	5.2.0	IBM Tivoli OMEGAMON XE for DB2 Performance Monitor on z/OS
5655-018	2.1.0	IBM InfoSphere Optim workload Replay for DB2 for z/OS

### **Product identification number**

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Program PID number	Subscription and Support PID number
5697-P46	5697-N67
5697-Q04	5655-R30
5697-DAQ	5697-DAS
5655-DAT	5655-E90
5655-W35	5655-E55
5639-OLC	5639-OLD
5655-T56	5655-E86
5655-DOC	5655-E40
5697-Q01	5655-E49
5655-E74	5655-E75

5655-V42	5655-E87
5655-W60	5655-E97
5655-W87	5648-D68
5655-W37	5655-R07
5655-W38	5655-R08
5655-O18	5655-QCS

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## Offering Information

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Product information is available via the Offering Information website

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

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## Publications

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The IBM Publications Center portal is at

<http://www.ibm.com/e-business/linkweb/publications/servlet/pbi.wss>

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. A large number of publications are available online in various file formats, and they can all be downloaded by all countries, free of charge.

One copy of each of the following publications is supplied automatically with the material.

Title	Order number
IBM DataQuant for z/OS, V2.1 (5697-P46)	
License Information(2)	GC19-4128
Program Directory	GI10-8961
CD Kit	LK5T-8889
IBM DB2 Accessories Suite for z/OS, V3.1 (5697-Q04)	
DB2 Accessories Suite V11	
License Information(2) DB2 v11	GC19-4156
Program Directory DB2 V10	GI10-8957
IBM Data Studio V4.1 kit	LK57-8880
DB2 Accessories Suite V10	
License Information(2) DB2 V10	GC19-4157
Program Directory DB2 V10	GI10-8958
JSON capabilities for DB2 for z/OS	LCD4-8543
IBM Data Studio V4.1 kit	LK57-8880
DB2 Accessories Suite V9	
License Information(2) DB2 V9	GC19-4158
Program Directory DB2 V9	GI10-8959
IBM Data Studio V4.1 kit	LK57-8880
IBM DB2 Administration Solution Pack for z/OS, V2.1 (5697-DAQ)	
License Information(2)	GC19-4146
Program Directory	GI10-8978
IBM DB2 Administration Tool for z/OS, V11.1 (5655-DAT)	
License Information(2)	GC19-4133
Program Directory	GI10-8972
IBM DB2 Buffer Pool Analyzer for z/OS, V5.2 (5655-W35)	
License Information(2)	GH12-6974
Program Directory	GI19-5010
IBM DB2 Data Access Common Collector for z/OS. V1.1 (5639-OLC)	
License Information(2)	GC19-4135
Program Directory	GI10-8973

IBM DB2 Log Analysis Tool for z/OS, V3.4 (5655-T56)	
License Information(2)	GC19-1301
Program Directory	GI10-8772
IBM DB2 Object Comparison Tool for z/OS, V11.1 (5655-DOC)	
License Information(2)	GC19-4138
Program Directory	GI10-8974
IBM DB2 Path Checker for z/OS, V4.2 (5697-Q01)	
License Information(2)	GC19-4140
Program Directory	GI10-8975
IBM DB2 Performance Solution Pack for z/OS, V1.2 (5655-E74)	
Standard: License Information(2)	GC19-3988
Program Directory	GI10-8840
ITOA Support Files for z/OS V5.1.1 DVD	LCD7-5139
KKIT Collection: DB2 ESE V10.5 for OMPE V5.2.0 L-Pkit	LK4T-5002
KKIT Component: Data Server Client V10.5 Linux™ 32-bit	LCD7-5735
KKIT Component: Data Server Client V10.5 Linux 64-bit	LCD7-5736
KKIT Component: Data Server Client V10.5 Windows 64-bit	LCD7-5738
KKIT Component: Data Server Client V10.5 Windows 32-bit	LCD7-5737
KKIT Component: DB2 ESE V10.5 AIX® DVD	LCD7-5729
KKIT Component: DB2 ESE V10.5 HP-UX Itanium-based DVD	LCD7-5730
KKIT Component: DB2 ESE V10.5 Linux 64-bit DVD	LCD7-5726
KKIT Component: DB2 ESE V10.5 Linux Power® (systems i&p)	LCD7-5728
KKIT Component: DB2 ESE V10.5 Linux System z® DVD	LCD7-5727
KKIT Component: DB2 ESE V10.5 Restricted Use Activation	LCD7-5739
KKIT Component: DB2 ESE V10.5 Solaris 32-bit DVD	LCD7-5731
KKIT Component: DB2 ESE V10.5 Solaris 64-bit DVD	LCD7-5732
KKIT Component: DB2 ESE V10.5 Windows 64-bit DVD	LCD7-5734
KKIT Collection: OMPE on z/OS V5.2.0 L-Pkit	LK4T-5001
KKIT Component: Optim Data Tools Runtime Client	LCD7-2622
KKIT Component: Optim PE Extended Edition Plugin	LCD7-2623
KKIT Component: Optim PE for LUW Server AIX, Linux, WIN	LCD7-2621
KKIT Component: Tivoli OMEGAMON DB2 PE Activation Key	LCD7-2624
Tivoli OMEGAMON XE Language Packs for z/OS	LCD7-5138
Tivoli OMEGAMON XE and Tivoli Management Services on z/OS: Upgrade Guide	SC22-5486
IBM DB2 Query Monitor for z/OS, V3.2 (5655-V42)	
License Information(2)	GC19-4142
Program Directory	GI10-8976
IBM DB2 SQL Performance Analyzer for z/OS, V4.2 (5655-W60)	
License Information(2)	GC19-4144
Program Directory	GI10-8977
IBM DB2 Utilities suite for z/OS, V11.1 (5655-W87)	
License Information(2)	GC19-4155
Program Directory	GI10-8960
IBM Tivoli OMEGAMON XE for DB2 Performance Expert on z/OS, V5.2 (5655-W37) - English	
Program Directory	GI19-5007
Tivoli OMEGAMON XE for DB2 PE License Information CD(2)	LCD7-2645
Tivoli OMEGAMON XE for DB2 PM License Information CD(2)	LCD7-2646
Tivoli OMEGAMON XE and Tivoli Management Services on z/OS: Upgrade Guide	SC22-5486
Tivoli OMEGAMON XE Monitoring Agents on z/OS Quick Start Guide	GI13-2314
ITOA Support Files for z/OS V5.1.1 DVD	LCD7-5139
KKIT Collection: DB2 ESE V10.5 for OMPE V5.2.0 L-Pkit	LK4T-5002
KKIT Component: Data Server Client V10.5 Linux 32-bit	LCD7-5735

KKIT Component: Data Server Client V10.5 Linux 64-bit	LCD7-5736
KKIT Component: Data Server Client V10.5 Windows 64-bit	LCD7-5738
KKIT Component: Data Server Client V10.5 Windows 32-bit	LCD7-5737
KKIT Component: DB2 ESE V10.5 AIX DVD	LCD7-5729
KKIT Component: DB2 ESE V10.5 HP-UX Itanium-based DVD	LCD7-5730
KKIT Component: DB2 ESE V10.5 Linux 64-bit DVD	LCD7-5726
KKIT Component: DB2 ESE V10.5 Linux Power (systems i&p)	LCD7-5728
KKIT Component: DB2 ESE V10.5 Linux System z DVD	LCD7-5727
KKIT Component: DB2 ESE V10.5 Restricted Use Activation	LCD7-5739
KKIT Component: DB2 ESE V10.5 Solaris 32-bit DVD	LCD7-5731
KKIT Component: DB2 ESE V10.5 Solaris 64-bit DVD	LCD7-5732
KKIT Component: DB2 ESE V10.5 windows 64-bit DVD	LCD7-5734
KKIT Collection: OMPE on z/OS V5.2.0 L-Pkit	LK4T-5001
KKIT Component: Optim Data Tools Runtime Client	LCD7-2622
KKIT Component: Optim PE Extended Edition Plugin TEP	LCD7-2623
KKIT Component: Optim PE for LUW Server AIX, Linux, WIN	LCD7-2621
KKIT Component: Tivoli OMEGAMON DB2 PE Activation Key	LCD7-2624
Tivoli OMEGAMON XE Language Packs for z/OS	LCD7-5138

IBM Tivoli OMEGAMON XE for DB2 Performance Expert on z/OS, V5.2 (5655-w37) - Japanese

Tivoli OMEGAMON XE DB2 PM License CD(2)	LCD7-2645
Japanese Program Directory	GI19-5008
Tivoli OMEGAMON XE and Tivoli Management Services on z/OS: Upgrade Guide	SC22-5486
ITOA Support Files for z/OS V5.1.1 DVD	LCD7-5139
Tivoli OMEGAMON XE Language Packs for z/OS	LCD7-5138
Tivoli OMEGAMON XE Monitoring Agents on z/OS Quick Start Guide	GI13-2314

IBM Tivoli OMEGAMON XE for DB2 Performance Monitor on z/OS, V5.2 (5655-w38) - English

Tivoli OMEGAMON XE DB2 PM License CD(2)	LCD7-2646
Program Directory	GI19-5009
Tivoli OMEGAMON XE and Tivoli Management Services on z/OS: Upgrade Guide	SC22-5486
ITOA Support Files for z/OS V5.1.1 DVD	LCD7-5139
Tivoli OMEGAMON XE Language Packs for z/OS	LCD7-5138
Tivoli OMEGAMON XE Monitoring Agents on z/OS Quick Start Guide	GI13-2314

IBM Tivoli OMEGAMON XE for DB2 Performance Monitor on z/OS, V5.2 (5655-w38) - Japanese

Tivoli OMEGAMON XE for DB2 PM License CD(2)	LCD7-2646
Japanese Program Directory	GI19-5008
Tivoli OMEGAMON XE and Tivoli Management Services on z/OS: Upgrade Guide	SC22-5486
ITOA Support Files for z/OS V5.1.1 DVD	LCD7-5139
Tivoli OMEGAMON XE Language Packs for z/OS	LCD7-5138
Tivoli OMEGAMON XE Monitoring Agents on z/OS Quick Start Guide	GI13-2314

IBM InfoSphere Optim workload Replay for DB2 for z/OS, V2.1 (5655-018)

InfoSphere Optim workload Replay License Information CD(2)	LCD4-8554
Program Directory	GI10-8980
KKIT Collection: InfoSphere Guardium V9 for Optim workload Replay V2.1	LK5T-8895
KKIT Component: InfoSphere Guardium V9 Base Product Image DVD	LCD4-8529
KKIT Component: InfoSphere Guardium V9 Product Manuals DVD	LCD4-8530
KKIT Collection: InfoSphere Optim workload Replay z/OS V2.1	LK5T-8894
KKIT Component: InfoSphere Optim workload Replay z/OS V2.1 product key CD	LCD4-8528
KKIT Component: InfoSphere Optim workload Replay z/OS V2/11 DVD	LCD4-8527

IBM InfoSphere Optim workload Replay for DB2 for z/OS, Program Install (5655-018)

License Information CD(2)	LCD4-8554
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(2) Included with this publication order number are the Base License Agreements: (a) IBM International Program License Agreement (form Z125-3301) and (b) IBM Agreement for Acquisition of Software Maintenance (form Z125-6011)

The publications for products in this announcement cannot be ordered in hardcopy. All the publications in this announcement are available at:

- For DB2 Tools  
<http://www.ibm.com/support/docview.wss?uid=swg27020910>
- For IMS™ Tools  
<http://www.ibm.com/support/docview.wss?uid=swg27020942>

Title	Order number
IBM DataQuant for z/OS, V2.1: Getting Started with DataQuant	SC19-4004
Installing and Managing DataQuant	GC19-4003
Introducing DataQuant	GC19-4002
IBM DB2 Administration Solution Pack for z/OS, V2.1 Overview and Customization Guide	SC19-4147
IBM DB2 Administration Tool for z/OS, V11.1: User's Guide	SC19-4134
IBM DB2 Buffer Pool Analyzer for z/OS, V5.2 User's Guide	SH12-7029
Configuration Guide	SH12-7030
IBM DB2 Data Access Common Collector for z/OS, V1.1: User's Guide	SC19-4136
IBM DB2 Log Analysis Tool for z/OS, V3.4: User's Guide	SC19-4137
IBM DB2 Object Comparison Tool for z/OS, V11.1: User's Guide	SC19-4139
IBM DB2 Path Checker for z/OS, V4.2: User's Guide	SC19-4141
IBM Performance Solution Pack for z/OS, V1.2 Overview and Customization Guide	SC19-4148
IBM DB2 Query Monitor for z/OS, V3.2 User's Guide	SC19-4143
IBM DB2 SQL Performance Analyzer for z/OS, V4.2 User's Guide	SC19-4145
IBM InfoSphere Optim workload Replay for DB2 for z/OS, V2.1 Installation Guide	GC19-4162
Quick Start Guide	GC19-4161

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## Technical information

### Specified operating environment

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#### **Hardware requirements**

The products in this announcement will operate on any System z hardware configuration that supports the required versions of DB2 and z/OS .



## Additional hardware requirements

IBM DataQuant for z/OS , V2.1 requires:

- IBM DataQuant for Workstation 2.1 requires:
  - Network connectivity
  - Approximately 1 GB disk space
  - Approximately 1 GB of RAM
- IBM DataQuant for WebSphere 2.1 requires:
  - Approximately 500 MB disk space
  - Approximately 1 GB of RAM on each server in which it is installed

IBM DB2 Accessories Suite for z/OS , bundled components requires:

- JSON capability for DB2 for z/OS hardware requires: System z or equivalent processors running in a 64-bit mode with z/OS V1.10, or later. This includes zEnterprise® 196 (z196), z10™ , z9® , z990, z890, and later processors.
- ICU, Spatial Support and IBM Text Search hardware prerequisites are a z/Architecture® based processor (any System z model) running in a 32- and 64-bit addressing mode. The IBM Text Search Server for DB2 for z/OS prerequisites (for both 32-bit and 64-bit) are:
  - For Red Hat Enterprise Linux , SUSE Enterprise Linux , Linux on System z or Windows
    - 2 dual-core 2.66 GHz processors
    - 4 GB RAM
    - Enough disk space to hold 4 times the original text size for each collection
  - For z/Linux Servers (64-bit only)
    - 2 CPUs
    - 8 GB RAM
    - Enough disk space to hold 4 times the original text size multiplied by the number of text search indexes. Each text column in a DB2 table has a corresponding text search index on the IBM Text Search for DB2 for z/OS . For example, if a text search server supports five indexes, each with 1 million rows of 1 KB text size, the required disk space needed is approximately 20 GB. This hardware is used exclusively by the IBM Text Search for DB2 for z/OS .

IBM DB2 Administration Solution Pack for z/OS , V2.1 (5697-DAQ) requires:

- Desktop components requirements: Any hardware configuration that supports the supported operating environments and supported Internet browsers.
- Before you install InfoSphere Optim Configuration Manager for DB2 for z/OS , V3.1 (5655-AA3) server, verify that the system hosting the server (distributed machine) meets the minimum hardware requirements:
  - 5 GB available hard drive space
  - 3 GB memory

IBM DB2 Query Monitor for z/OS , V3.2 (5655-V42), Server host requires:

- Any hardware configuration that supports Windows XP or Windows 7
- Minimum 1 GB RAM
- Minimum 1 GB disk space
- Minimum 1 GHz processor speed
- Network access via LAN, T1, DSL, or cable modem
- Network protocol TCP/IP
- SVGA monitor supporting 256 colors, or greater

IBM InfoSphere Optim Workload Replay for DB2 for z/OS , V2.1 (5655-O18) includes a System z component and a stand-alone appliance component.

- The System z component works with any System z hardware configuration that supports the required versions of DB2 and z/OS .
- The appliance component is based on the IBM Guardium platform that operates on Linux based server.

### **Software requirements**

#### **Mandatory installation requirements**

- One of the following:
  - IBM z/OS , V1.12 (5694-A01), or later
  - IBM z/OS , V2.1 (5650-ZOS), or later
- IBM SMP/E for z/OS V3.5 (5655-G44), or later

DB2 Query Monitor for z/OS , V3.2 requires IBM DB2 Data Access Common Collector for z/OS V1.1 (5639-OLC), or later

IBM DB2 Utilities Suite for z/OS , V11.1 (5655-W87) is packaged for installation and execution with DB2 11 for z/OS

IBM Tivoli OMEGAMON XE for DB2 Performance Expert on z/OS , V5.2 (5655-W37) and IBM Tivoli OMEGAMON XE for DB2 Performance Monitor on z/OS , V5.2 (5655-W38) require IBM Tivoli Monitoring V6.2.3 (5698-A79)

IBM InfoSphere Optim Workload Replay for DB2 for z/OS , V2.1 (5655-O18) requires:

- IBM DB2 Data Access Common Collector for z/OS , V1.1 (5639-OLC)
- IBM Tools Base for z/OS , V1.4 (5655-V93)
- The following operating system is supported:
  - Red Hat Enterprise Linux 5.8 x86-32 and x86-64
- Supported web browsers:
  - Microsoft Internet Explorer 8.0, or later
  - Mozilla Firefox ESR 17
  - Chrome 20

#### **Mandatory operational requirements**

The following products:

- IBM DB2 Accessories Suite for z/OS , V3.1 (5697-Q04)
- IBM DB2 Administration Solution Pack for z/OS , V2.1 (5697-DAQ)
- IBM DB2 Administration Tool for z/OS , V11.1 (5655-DAT)
- IBM DB2 Buffer Pool Analyzer for z/OS , V5.2 (5655-W35)
- IBM DB2 Data Access Common Collector for z/OS , V1.1 (5639-OLC)
- IBM DB2 Log Analysis Tool for z/OS , V3.4 (5655-T56)
- IBM DB2 Object Comparison Tool for z/OS , V11.1 (5655-DOC)
- IBM DB2 Path Checker for z/OS , V4.2 (5697-Q01)
- IBM DB2 Performance Solution Pack for z/OS , V1.2 (5655-E74)
- IBM DB2 Query Monitor for z/OS , V3.2 (5655-V42)
- IBM DB2 SQL Performance Analyzer for z/OS , V4.2 (5655-W60)
- IBM Tivoli OMEGAMON XE for DB2 Performance Expert on z/OS , V5.2 (5655-W37)

- IBM Tivoli OMEGAMON XE for DB2 Performance Monitor on z/OS , V5.2 (5655-W38)
- IBM InfoSphere Optim Workload Replay for DB2 for z/OS , V2.1 (5655-O18)

operate with:

- IBM DB2 V9.1 (5635-DB2)
- IBM DB2 Value Unit Edition, V9.1 (5697-P12)
- IBM DB2 V10.1 (5605-DB2)
- IBM DB2 Value Unit Edition, V10.1 (5697-P31)
- IBM DB2 V11.1 (5615-DB2)
- IBM DB2 Value Unit Edition, V11.1 (5697-P43)

IBM DB2 Utilities Suite for z/OS , V11.1 (5655-W87) operates with:

- IBM DB2 V11.1 (5615-DB2)
- IBM DB2 Value Unit Edition, V11.1 (5697-P43)

IBM DataQuant for z/OS , V2.1 (5697-P46) operates with:

- IBM DB2 V9.1 (5635-DB2)
- IBM DB2 Value Unit Edition, V9.1 (5697-P12)
- IBM DB2 V10.1 (5605-DB2)
- IBM DB2 Value Unit Edition, V10.1 (5697-P31)
- IBM DB2 V11.1 (5615-DB2)
- IBM DB2 Value Unit Edition, V11.1 (5697-P43)
- IBM DB2 for iSeries® V5.4, V6.1, and V7.1
- IBM DB2 for Linux UNIX™ , and Windows , V9.5, V9.7, V10.1, and V10.5
- Informix® Dynamic Server V11.5 and V12.10

For a detailed list of QMF hardware and software requirements, visit

<http://www-01.ibm.com/support/docview.wss?uid=swg27039375>

DataQuant for Workstation installs on one of the following operating systems:

- Mac OS X 10.6, 10.7, and 10.8
- Windows XP, Windows Vista, Windows 7, Windows 8, Windows Server 2008, and Windows Server 2012
- Red Hat Enterprise Linux 5 and 6
- SUSE Linux 10, 11, or 12

DataQuant for WebSphere requires:

- One of the following browsers:
  - Microsoft Internet Explorer 7, or later
  - Mozilla Firefox 4, or later
  - Apple Safari browser 5.1, or later
  - Google Chrome browser 7, or later
- One of the following Web servers:
  - IBM WebSphere Application Server V7.0, V8.0, and V8.5
  - Apache Tomcat 6 and 7

IBM DB2 Accessories Suite for z/OS capability for DB2 for z/OS requires:

- IBM DB2 V10.1 (5605-DB2)

- DB2 Value Unit Edition V10.1 (5697-P31)
- Java Runtime Environment 1.5, or later
- z/OS V1.10 (5694-A01) with Language Environment® Base Services, or later

For post-installation customization, DB2 Administration Solution Pack for z/OS , V2.1; DB2 Administration Tool, V11.1; DB2 Log Analysis Tool for z/OS , V3.4; DB2 Object Comparison Tool for z/OS , V11.1; DB2 Path Checker for z/OS , V4.2; DB2 Query Monitor for z/OS , V3.2; DB2 SQL Performance Analyzer for z/OS , V4.2; and DB2 Performance Solution Pack for z/OS , V1.2 require FMID HTCZ110 IBM Tools Customizer for z/OS at the latest maintenance level which is delivered in IBM Tools Base, V1.4 (5655-V93)

DB2 Object Comparison Tool for z/OS , V11.1 requires DB2 Administration Tool for z/OS , V11.1

The IBM InfoSphere Optim Query Workload Tuner for DB2 for z/OS , V3.2 component of DB2 Performance Solution Pack for z/OS , V1.2 requires:

- Microsoft Windows 7 x86-32 and x86-64
- Windows Vista x86-32 and x86-64
- Windows XP SP2 x86-64 and SP3 x86-32
- Windows Server 2003 R2 x86-32 and x86-64
- Windows Server 2008 x86-32 and x86-64
- Windows Server 2008 R2 x86-64

DB2 Query Monitor for z/OS , V3.2 requires:

- If you want to run the CAE Server under USS, requires the most current maintenance of (31-bit) Java 1.6 (including all prerequisites) must be installed on your mainframe.

**Note:** This requirement applies to running the CAE Server under USS and is not required if you only plan to run the CAE Agent on an LPAR. Java builds are available at

<http://www-03.ibm.com/servers/eserver/zseries/software/java/j5pcont31.html>

- For the DB2 Query Monitor Web Client:
  - Mozilla Firefox 2.0.0.13, or later
  - Microsoft Internet Explorer V8. or later
  - Adobe™ Flash Player 10

InfoSphere Optim Workload Replay for DB2 for z/OS , V2.1 requires IBM 31-bit SDK for z/OS , Java Technology Edition, V6.0.0, SDK6 (5655-R31)

### Conditional operational requirements

DB2 Administration Solution Pack for z/OS , V2.1 requires:

- IBM DB2 Cloning Tool for z/OS , V3.1 (5655-N15) for launching Cloning Tool in order to perform a clone of a selected list of table spaces
- Detailed hardware and software requirements for the InfoSphere Configuration Manager for DB2 for z/OS , V3.1 (5655-AA3) component of DB2 Administration Solution Pack for z/OS , refer to the following support page

<http://www.ibm.com/support/docview.wss?uid=swg27038148>

DB2 Administration Tool for z/OS , V11.1 requires DB2 Object Comparison Tool for z/OS , V11.1 for use of the Change Management function.

DB2 Log Analysis Tool for z/OS , V3.4 requires IBM DB2 Sort for z/OS to be installed on the DB2 subsystem you plan to use with DB2 Log Analysis Tool if you want to use DB2 SORT for sort processing.

DB2 Utilities Suite for z/OS , V11.1 (5655-W87) requires:

- 5694-A01, z/OS V01.13.00, for function: DFSORT use of zIIP
- 5694-A01, z/OS V01.13.00 (DFSMSHsm, DFSMSdss and Flashcopy V02.00.00), for function: Volume-based utilities and copy and recovery utilities
- 5694-A01, z/OS V01.13.00, DFSMSdss and FlashCopy® V02.00.00 are required for the following utilities that run with SHRLEVEL CHANGE:
  - CHECK INDEX
  - CHECK DATA
  - CHECK LOB

DB2 Version 11 Utilities can use DFSORT regardless of whether or not you have purchased a full license for DFSORT on your system. For additional information, see APARs II14047, II14213, and II13495.

Note: DB2 Version 11 Utilities can use the IBM DB2 Sort for z/OS (5655-W42) product as an alternative to DFSORT for utility SORT and MERGE functions. Exploitation of DB2 Sort for z/OS requires purchase of a DB2 Sort license. Refer to DB2 Sort documentation for further details regarding this product. An overview of DB2 Sort can be found at:

<http://www.ibm.com/software/data/db2imstools/db2tools/db2-sort/>

InfoSphere Optim Workload Replay for DB2 for z/OS , V2.1 requires:

- IBM DB2 Cloning Tool for z/OS , V3.1 (5655-N15), or later
- IBM 64-bit SDK for z/OS , Java Technology Edition, V6.0.0, SDK6 (5655-R32)

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.

## **User group requirements**

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This announcement satisfies or partially satisfies requirements from one or more of the worldwide user group communities. Groups include COMMON, COMMON Europe, Guide Share Europe (GSE), InterAction (Australia/New Zealand), Japan Guide Share (JGS), and SHARE Inc.

DB2 Administration Tool for z/OS , V11.1 (5655-DAT) satisfies the following requirements:

RFE 29114	RFE 33719	RFE 32136
MR0108044243	MR0124055038	MR0131032254
MR0131051748	MR0202066117	MR0203054350
MR020404456	MR0204105249	MR0214076144
MR021410322	MR0305041558	MR030708355
MR032410384	MR0324113045	MR0324113858
MR0330064035	MR0407042422	MR0411066254
MR0411066827	MR0429043426	MR0429046354
MR0430024311	MR0430041016	MR050906599
MR0512051354	MR0609104650	MR0619023823
MR0626040249	MR062907176	MR0630102431
MR0705061124	MR0705062529	MR0708036657
MR0712045830	MR0717062534	MR072010218
MR0726045227	MR080910247	MR0818062450
MR0819032554	MR0821086115	MR0830051233
MR0831044734	MR0912032510	MR0926026522
MR0928052153	MR092809197	MR1001036319
MR1005093129	MR100704107	MR1008095053
MR1022074348	MR102403161	MR1107033817
MR1112071648	MR1122072851	MR1123113333

MR112511432      MR1130061043      MR1212073421  
MR1216036920

DB2 Object Comparison Tool for z/OS , 11.1 (5655-DOC) satisfies the following requirements:

RFE 29114	RFE 28412	RFE 32136
MR0119051212	MR0119055413	MR0124055038
MR0202066117	MR0214076144	MR021410322
MR0307083550	MR032410384	MR0324113045
MR0324113858	MR0330064035	MR0410072255
MR0514103757	MR052312508	MR0618107230
MR0626040249	MR0630102431	MR0705062529
MR0708036657	MR0717062534	MR072010218
MR0726045227	MR0731062656	MR080910247
MR0819032554	MR0831044734	MR092809197
MR1001036319	MR1008095053	MR1022074348
MR1025067735	MR1104031338	MR1112071648
MR1122072851	MR1123113333	MR112511432
MR1128114523	MR1212074532	MR1216055540

DB2 SQL Performance Analyzer for z/OS , V4.2 (5655-W60) satisfies the following requirements:

MR1121112315	MR110508728	MR0713122928
MR100611221	MR0929111111	MR1107082840
MR0818096943		

Tivoli OMEGAMON XE for DB2 Performance Expert for z/OS , V5.2 (5655-W37) satisfies the following requirements:

RFE 18720	RFE 14982	RFE 18712
RFE 18727	RFE 24439	RFE 17415

Tivoli OMEGAMON XE for DB2 Performance Monitor for z/OS , V5.2 (5655-W38) satisfies the following requirements:

RFE 18720	RFE 14982	RFE 18712
RFE 18727	RFE 24439	RFE 17415

## **Planning information**

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### **Packaging**

The programs in this announcement are distributed with the following content:

- Basic machine-readable material
- Program Directory
- IBM International Program License Agreement (IPLA)
- IBM Agreement for Acquisition of Software Maintenance (IAASM)

### **Security, auditability, and control**

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The announced program uses 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.

### **Global Technology Services®**

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Contact your IBM representative for the list of selected services available in your country, either as standard or customized offerings for the efficient installation, implementation, or integration of this product.

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## Ordering information

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Consult your IBM representative.

### 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>

The products in this announcement have one charge unit - Value Units.

Translation from MSUs to Value Units example using VUE001

	MSUs	Value Units/MSU
Base	1-3	5.25
Tier A	4-45	.83
Tier B	46-175	.35
Tier C	176-315	.26
Tier D	316+	.20

Note: For the actual translation from MSUs to Value Units for this product, refer to the table that follows.

### Ordering example

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

If the customer has installed 1,000 MSUs, the applicable Value Units would be:

Translation from MSUs to Value Units (VUE001)

	MSUs	*	Value Units/MSU	=	Value Units
Base	3	*	5.25	=	15.75
Tier A	42	*	.83	=	34.86
Tier B	130	*	.35	=	45.50
Tier C	140	*	.26	=	36.40
Tier D	685	*	.20	=	137.00
Total	1,000				270

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

Value Units for non-MSU-based S/390® processors using VUE001:

MP3000 models	
H30	= 21.00 value units per machine
H50	= 22.00 value units per machine
H70	= 26.00 value units per machine
ESL models	= 9.00 value units per machine

## Charge metric

Program name	PID number	Charge metric
IBM DataQuant for z/OS	5697-P46	Value Unit
IBM DB2 Accessories Suite for z/OS	5697-Q04	No charge Install(s)
IBM DB2 Administration Solution Pack for z/OS	5697-DAQ	Value Unit
IBM DB2 Administration Tool for z/OS	5655-DAT	Value Unit
IBM DB2 Buffer Pool Analyzer for z/OS	5655-W35	Value Unit
IBM DB2 Data Access Common Collector for z/OS	5639-OLC	No charge Install(s)
IBM DB2 Log Analysis Tool for z/OS	5655-T56	Value Unit
IBM DB2 Object Comparison Tool for z/OS	5655-DOC	Value Unit
IBM DB2 Path Checker for z/OS	5697-Q01	Value Unit
IBM DB2 Performance Solution Pack for z/OS	5655-E74	Value Unit
IBM DB2 Query Monitor for z/OS	5655-V42	Value Unit
IBM DB2 SQL Performance Analyzer for z/OS	5655-W60	Value Unit
IBM DB2 Utilities Suite for z/OS	5655-W87	Value Unit
IBM Tivoli OMEGAMON XE for DB2 Performance Expert on z/OS	5655-W37	Value Unit
IBM Tivoli OMEGAMON XE for DB2 Performance Monitor on z/OS	5655-W38	Value Unit
IBM InfoSphere Optim workload Replay for DB2 for z/OS	5655-O18	Value Unit
IBM InfoSphere Optim workload Replay for DB2 for z/OS Program Install	5655-O18	Program Install
IBM InfoSphere Optim workload Replay for DB2 for z/OS, Subscription and Support	5655-QCS	Value Unit
IBM InfoSphere Optim workload Replay for DB2 for z/OS Program Install, Subscription and Support	5655-QCS	Program Install

InfoSphere Optim Workload Replay for DB2 for z/OS consists of two chargeable units that should be ordered together.

The following programs in this announcement have Value-Unit pricing.

Program number	Program name	Value Unit Exhibit
5697-P46	DataQuant for z/OS, V2.1	VUE007
5697-DAQ	DB2 Administration Solution Pack for z/OS, V2.1	VUE007
5655-DAT	DB2 Administration Tool for z/OS, V11.1	VUE007
5655-W35	DB2 Buffer Pool Analyzer for z/OS, V5.2	VUE007
5655-T56	DB2 Log Analysis Tool for z/OS, V3.4	VUE007
5655-DOC	DB2 Object Comparison Tool for z/OS, V11.1	VUE007
5697-Q01	DB2 Path Checker for z/OS, V4.2	VUE007
5655-E74	DB2 Performance Solution Pack for z/OS, V1.2	VUE007
5655-V42	DB2 Query Monitor for	VUE007



	z/OS, V3.2	
5655-W60	DB2 SQL Performance Analyzer for z/OS, V4.2	VUE007
5655-W87	DB2 Utilities Suite for z/OS, V11.1	VUE001
5655-W37	Tivoli OMEGAMON XE for DB2 Performance Expert on z/OS, V5.2	VUE007
5655-W38	Tivoli OMEGAMON XE for DB2 Performance Monitor on z/OS, V5.2	VUE007
5655-018	InfoSphere Optim workload Replay for DB2 for z/OS, V2.1	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 VUE001

Level	Minimum	Maximum	Value Units/MSU
Base	1	3	5.25
Tier A	4	45	0.83
Tier B	46	175	0.35
Tier C	176	315	0.26
Tier D	316	+	0.20

Value Units for mainframes without MSU ratings:

Hardware	Value Units/machine
MP3000 H30	21
MP3000 H50	22
MP3000 H70	26
ESL models	9

#### 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.

### Basic license

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#### On/Off CoD

The products in this announcement are eligible for On/Off Capacity on Demand (CoD) with a temporary use charge calculated based on MSUs per-day usage.

Translation from MSUs to value Units

	MSUS	Value Units/MSU
Base	1-3	1.00
Tier A	4-45	.45
Tier B	46-175	.36
Tier C	176-315	.27
Tier D	316+	.20

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 DataQuant for z/OS, V2.1  
 Program PID: 5697-P46

Entitlement identifier	Description	License option / Pricing metric
S01731R	DataQuant V2	Basic OTC, Value Units Basic OTC, Per MSU-day TUC

Orderable supply ID	Language	Distribution medium
S01731P	Multilingual	3590 Tape Cartridge

Program Name: IBM DB2 Accessories Suite for z/OS, V3.1.0  
 Program PID: 5697-Q04

Entitlement identifier	Description	License option / Pricing metric
S017BM4	DB2 Accessories Suite V11	No charge, unlimited installs

Orderable supply ID	Language	Distribution medium
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## TUC

Orderable supply ID	Language	Distribution medium
S016K5H	English	3590 Tape Cartridge

Program Name: IBM DB2 Data Access Common Collector for z/OS, V1.1  
 Program PID: 5639-OLC

Entitlement identifier	Description	License option / Pricing metric
S017B83	DB2 Data Access Common Collector	No charge, unlimited installs

Orderable supply ID	Language	Distribution medium
S017B82	English	3590 Tape Cartridge

Program Name: IBM DB2 Log Analysis Tool for z/OS, V3.4  
 Program PID: 5655-T56

Entitlement identifier	Description	License option / Pricing metric
S014J6K	DB2 Log Analysis Tool V3	Basic OTC, Value Units Basic OTC, Per MSU-day TUC

Orderable supply ID	Language	Distribution medium
S0166C9	English	3590 Tape Cartridge

Program Name: IBM DB2 Object Comparison Tool for z/OS, V11.1  
 Program PID: 5655-DOC

Entitlement identifier	Description	License option / Pricing metric
S017B89	DB2 Object Comparison Tool V11	Basic OTC, Value Units Basic OTC, Per MSU-day TUC

Orderable supply ID	Language	Distribution medium
S017B88	English	3590 Tape Cartridge

Program Name: IBM DB2 Path Checker, V4.2  
 Program PID: 5697-Q01

Entitlement identifier	Description	License option / Pricing metric
S016394	DB2 Path Checker V4	Basic OTC, Value Units Basic OTC, Per MSU-day TUC

Orderable supply ID	Language	Distribution medium
S016388	English	3590 Tape Cartridge

Program Name: IBM DB2 Performance Solution Pack for z/OS, V1.2  
 Program PID: 5655-E74

Entitlement identifier	Description	License option / Pricing metric
S0175XN	DB2 Performance Solution Pack V1	Basic OTC, Value Units Basic OTC, Per MSU-day

Trade up from 5655-W37 TUC  
 Trade-up from 5655-W37 and  
 5655-V42  
 Trade-up from 5655-W37 and  
 5655-V42 and 5655-W60  
 Trade-up from 5655-W37 and  
 5655-W60  
 Trade-up from 5655-V42  
 Trade-up from 5655-V42 and  
 5655-W60  
 Trade-up from 5655-W60  
 Trade-up from 5655-W94

Orderable supply ID	Language	Distribution medium
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S0175KG	English	3590 Tape Cartridge
S0175ZD	English	3590 Tape Cartridge

Program Name: IBM DB2 Query Monitor for z/OS, V3.2  
 Program PID: 5655-V42

Entitlement identifier	Description	License option / Pricing metric
S0166H0	DB2 Query Monitor V3	Basic OTC, Value Units Basic OTC, Per MSU-day TUC

Orderable supply ID	Language	Distribution medium
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S0166GZ	English	3590 Tape Cartridge
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Program Name: IBM DB2 SQL Performance Analyzer for z/OS, V4.2  
 Program PID: 5655-W60

Entitlement identifier	Description	License option / Pricing metric
S0163DJ	DB2 SQL Performance Analyzer V4	Basic OTC, Value Units Basic OTC, Per MSU-day TUC

Orderable supply ID	Language	Distribution medium
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S0163DK	English	3590 Tape Cartridge
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Program Name: IBM DB2 Utilities Suite for z/OS, V11.1  
 Program PID: 5655-W87

Entitlement identifier	Description	License option / Pricing metric
S017B8D	DB2 Utilities Suite V11	Basic OTC, Value Units Basic OTC, Per MSU-day TUC

Orderable supply ID	Language	Distribution medium
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S017B8C	English	3590 Tape Cartridge
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Program Name: IBM Tivoli OMEGAMON XE for DB2 Performance Expert on z/OS, V5.2  
 Program PID: 5655-W37

Entitlement identifier	Description	License option / Pricing metric
S016K5T	OMEGAMON XE for DB2 PE V5 Trade up from 5655-CXE Trade up from 5655-J50	Basic OTC, Value Units Basic OTC, Per MSU-day TUC

Trade up from 5655-Q08 TUC  
 Trade up from 5655-Q08 and  
 5655-R98  
 Trade up from 5655-W38  
 Trade up from 5655-W38 and  
 5655-W35

Orderable supply ID	Language	Distribution medium
S016K5L	Japan Kanji	3590 Tape Cartridge
S016K5K	English	3590 Tape Cartridge

Program Name: IBM Tivoli OMEGAMON XE for DB2 Performance Monitor on z/OS, V5.2  
 Program PID: 5655-W38

Entitlement identifier	Description	License option / Pricing metric
S016K5X	OMEGAMON XE for DB2 PM V5 Trade up from 5655-CXE Trade up from 5655-J50	Basic OTC, Value Units Basic OTC, Per MSU-day TUC

Orderable supply ID	Language	Distribution medium
S016K5N	Japan Kanji	3590 Tape Cartridge
S016K5P	English	3590 Tape Cartridge

Program Name: IBM InfoSphere Optim workload Replay for DB2 for z/OS, V2.1  
 Program PID: 5655-018

Entitlement identifier	Description	License option / Pricing metric
S017CFT	InfoSphere Optim workload Replay for DB2 for z/OS	Basic OTC, Value Units Basic OTC, Per MSU-day TUC

Orderable supply ID	Language	Distribution medium
S017CFR	Multilingual	3590 Tape Cartridge

Entitlement identifier	Description	License option / Pricing metric
S017CFV	InfoSphere Optim workload Replay for DB2 for z/OS Program Install	Basic OTC, Per Program Install

Orderable supply ID	Language	Distribution medium
S017D1M	Multilingual	3590 Tape Cartridge

Subscription and Support PID: 5697-N67

Entitlement identifier	Description	License options/Pricing metrics
S013T75	DataQuant V2 S&S	Basic MSC, per Value Unit SW S&S No charge, decline SW S&S Per MSU SW S&S registration

Orderable supply ID	Language	Distribution medium
S013T76	Multilingual	Hardcopy publication

Subscription and Support PID: 5655-R30

Entitlement identifier	Description	License options/Pricing metrics
S017BM7	DB2 Accessories Suite V11 S&S	No Charge Unlimited Installs S&S

Orderable supply ID	Language	Distribution medium
S017D12	English	Hardcopy publication

Entitlement identifier	Description	License options/Pricing metrics
S016G8X	DB2 Accessories Suite V10 S&S	No Charge Unlimited Installs S&S

Orderable supply ID	Language	Distribution medium
S016G90	English	Hardcopy publication

Entitlement identifier	Description	License options/Pricing metrics
S013JXJ	DB2 Accessories Suite V9 S&S	No Charge Unlimited Installs S&S

Orderable supply ID	Language	Distribution medium
S013JV5	English	Hardcopy publication

Subscription and Support PID: 5697-DAS

Entitlement identifier	Description	License options/Pricing metrics
S01730W	DB2 Administration Solution Pack S&S	Basic MSC, per Value Unit SW S&S No charge, decline SW S&S Per MSU SW S&S registration

Orderable supply ID	Language	Distribution medium
S01730V	English	Hardcopy publication

Subscription and Support PID: 5655-E90

Entitlement Identifier	Description	License Options/Pricing Metrics
S00V746	DB2 Administration Tool S&S	Basic MSC, per Value Unit SW S&S No charge, decline SW S&S Per MSU SW S&S registration

Orderable Supply ID	Language	Distribution Medium
S00TH8J	English	Hardcopy publication

Subscription and Support PID: 5655-E55

Entitlement Identifier	Description	License Options/Pricing Metrics
S00VZFD	DB2 Buffer Pool Analyzer S&S	Basic MSC, per Value Unit SW S&S No Charge, decline SW S&S Per MSU SW S&S Registration

Orderable supply ID	Language	Distribution Medium
S00VZFF	English	Hardcopy publication

Subscription and Support PID: 5639-OLD

Entitlement Identifier	Description	License Options/Pricing Metrics
S017B86	DB2 Data Access Common Collector V1 S&S	No Charge Unlimited Installs S&S

Orderable Supply ID	Language	Distribution Medium
S017B85	English	Hardcopy publication

Subscription and Support PID: 5655-E86

Entitlement Identifier	Description	License Options/Pricing Metrics
S00V748	DB2 Log Analysis Tool V3 S&S	Basic MSC, per Value Unit SW S&S No Charge, decline SW S&S Per MSU SW S&S Registration

Orderable Supply ID	Language	Distribution Medium
S00TH8N	English	Hardcopy publication

Subscription and Support PID: 5655-E40

Entitlement Identifier	Description	License Options/Pricing Metrics
S00V1JB	DB2 Object Comparison V11 S&S	Basic MSC, per Value Unit SW S&S No Charge, decline SW S&S Per MSU SW S&S Registration

Orderable Supply ID	Language	Distribution Medium
S00V1XZ	English	Hardcopy publication

Subscription and Support PID: 5655-E49

Entitlement Identifier	Description	License Options/Pricing Metrics
S00VH6H	DB2 Path Checker V4 S&S	Basic MSC, per Value Unit SW S&S No Charge, decline SW S&S Per MSU SW S&S Registration

Orderable Supply ID	Language	Distribution Medium
S00VH6J	English	Hardcopy publication

Subscription and Support PID: 5655-E75

Entitlement Identifier	Description	License Options/Pricing Metrics
S0175XP	DB2 Performance Solution Pack V1 S&S	Basic MSC, per Value Unit SW S&S No Charge, decline SW S&S Per MSU SW S&S Registration

Orderable Supply ID	Language	Distribution Medium
S0175XS	English	Hardcopy publication

Subscription and Support PID: 5655-E87

Entitlement Identifier	Description	License Options/Pricing Metrics
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S00V785	DB2 Query Monitor V3 S&S	Basic MSC, per Value Unit SW S&S No Charge, decline SW S&S Per MSU SW S&S Registration
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Orderable Supply ID	Language	Distribution Medium
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S00TH77	English	Hardcopy publication
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Subscription and Support PID: 5655-E97

Entitlement Identifier	Description	License Options/Pricing Metrics
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S00V74X	DB2 SQL Performance Analyzer V4 S&S	Basic MSC, per Value Unit SW S&S No Charge, decline SW S&S Per MSU SW S&S Registration
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Orderable Supply ID	Language	Distribution Medium
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S00V785	English	Hardcopy publication
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Subscription and Support PID: 5648-D68

Entitlement Identifier	Description	License Options/Pricing Metrics
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S00TKMF	DB2 Utilities Suite V11 S&S	Basic MSC, per Value Unit SW S&S No Charge, decline SW S&S Per MSU SW S&S Registration
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Orderable Supply ID	Language	Distribution Medium
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S00TKMK	English	Hardcopy publication
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Subscription and Support PID: 5655-R07

Entitlement Identifier	Description	License Options/Pricing Metrics
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S0122MR	Tivoli OMEGAMON XE for Performance Expert on z/OS S&S	Basic MSC, per Value Unit SW S&S No Charge, decline SW S&S Per MSU SW S&S Registration
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Orderable Supply ID	Language	Distribution Medium
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S0122MS	English	Hardcopy publication
S0122BNK	Japan Kanji	Hardcopy publication

Subscription and Support PID: 5655-R08

Entitlement Identifier	Description	License Options/Pricing Metrics
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S0122MV	Tivoli OMEGAMON XE for Performance Monitor on z/OS S&S	Basic MSC, per Value Unit SW S&S No Charge, decline SW S&S Per MSU SW S&S Registration
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Orderable Supply ID	Language	Distribution Medium
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S0122MW	English	Hardcopy publication
S0122BNJ	Japan Kanji	Hardcopy publication

Subscription and Support PID: 5655-QCS

Entitlement Identifier	Description	License Options/Pricing Metrics
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S0173DG	InfoSphere Optim workload Replay for DB2 for z/OS S&S	Basic MSC, Per Value Unit SW S&S No Charge, decline SW S&S Per MSU SW S&S Registration
Orderable Supply ID	Language	Distribution Medium
S0174GF	English	Hardcopy publication
Entitlement Identifier	Description	License Options/Pricing Metrics
S017CWZ	InfoSphere Optim workload Replay for DB2 for z/OS Program Install S&S	Basic MSC, Per Program Install No Charge, decline SW S&S
Orderable supply ID	Language	Distribution Medium
S017DB1	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.

### Withdrawal from Marketing (WFM) information

A new product release within a version supersedes the release level that precedes it. Accordingly, the following product releases will be withdrawn from marketing, effective on the date the new release becomes available.

### Releases to be withdrawn from marketing effective October 25, 2013

Name of product being withdrawn	Ver	Rel	Mod	Product Number
IBM DB2 Buffer Pool Analyzer for z/OS	5	1	1	5655-w35
IBM DB2 Log Analysis Tool for z/OS	3	3	0	5655-T56
IBM DB2 Path Checker for z/OS	4	1	0	5697-Q01
IBM DB2 Query Monitor for z/OS	3	1	0	5655-v42
IBM DB2 SQL Performance Analyzer for z/OS	4	1	0	5655-w60
IBM Tivoli OMEGAMON XE for DB2 Performance	5	1	1	5655-w37

Expert on z/OS  
IBM Tivoli OMEGAMON XE for DB2 Performance 5 1 1 5655-W38  
Monitor on z/OS

#### Replacement information :

- 5655-W35 IBM DB2 Buffer Pool Analyzer for z/OS , V5.1.1 is replaced by 5655-W35 IBM DB2 Buffer Pool Analyzer for z/OS , V5.2.0
- 5655-T56 IBM DB2 Log Analysis Tool for z/OS , V3.3.0 is replaced by 5655-T56 IBM DB2 Log Analysis Tool for z/OS , V3.4.0
- 5697-Q01 IBM DB2 Path Checker for z/OS , V4.1.0 is replaced by 5697-Q01 IBM DB2 Path Checker for z/OS , V4.2.0
- 5655-V42 IBM DB2 Query Monitor for z/OS , V3.1.0 is replaced by 5655-V42 IBM DB2 Query Monitor for z/OS , V3.2.0
- 5655-W60 IBM DB2 SQL Performance Analyzer for z/OS , V4.1.0 is replaced by 5655-W60 IBM DB2 SQL Performance Analyzer for z/OS , V4.2.0
- 5655-W37 IBM Tivoli OMEGAMON XE for DB2 Performance Expert on z/OS , V5.1.1 is replaced by 5655-W37 IBM Tivoli OMEGAMON XE for DB2 Performance Expert on z/OS , V5.2.0
- 5655-W38 IBM Tivoli OMEGAMON XE for DB2 Performance Monitor on z/OS , V5.1.1 is replaced by 5655-W38 IBM Tivoli OMEGAMON XE for DB2 Performance Monitor on z/OS , V5.2.0

#### Releases to be withdrawn from marketing effective December 6, 2013

Name of product being withdrawn	Ver	Rel	Mod	Product Number
IBM DB2 Performance Solution Pack for z/OS	1	1	0	5655-E74

#### Replacement information :

- 5655-E74 IBM DB2 Performance Solution Pack for z/OS , V1.1.0 is replaced by 5655-E74 IBM DB2 Performance Solution Pack for z/OS , V1.2.0

#### Customized offerings

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

All of these customized offerings are offered for Internet delivery in countries where Shopz 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 Shopz 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 include:

- 3590
- 3592

Most products can be ordered in ServerPac, SystemPac , FunctionPac, and ProductPac the month following their availability in CBPDO. z/OS can be ordered via CBPDO, ServerPac, and SystemPac at general availability. Many products will also be orderable in a Product ServerPac without also having to order the z/OS operating system or subsystem. Shopz and CFS W will determine the eligibility based on product requisite checking. For more details on the Product ServerPac, visit the Help section on the Shopz web site at

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

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 , FunctionPac and ProductPac shipments will begin four weeks after general availability due to additional customization, and data input verification.

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## Terms and conditions

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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**

Program name	Program number	License Information
IBM DataQuant for z/OS	5697-P46	GC19-4128
IBM DB2 Accessories Suite for z/OS, V3.1	5697-Q04	
DB2 Accessories Suite DB2 V11 feature		GC19-4156
DB2 Accessories Suite DB2 V10 feature		GC19-4157
DB2 Accessories Suite DB2 V9 feature		GC19-4158
IBM DB2 Administration Solution Pack for z/OS	5697-DAQ	GC19-4146
IBM DB2 Administration Tool for z/OS	5655-DAT	GC19-4133
IBM DB2 Buffer Pool Analyzer for z/OS	5655-W35	GH12-6974
IBM DB2 Data Access Common Collector for z/OS	5639-OLC	GC19-4135
IBM DB2 Log Analysis Tool for z/OS	5655-T56	GC19-1301
IBM DB2 Object Comparison Tool for z/OS	5655-DOC	GC19-4138
IBM DB2 Path Checker for z/OS	5697-Q01	GC19-4140

IBM DB2 Performance Solution Pack for z/OS	5655-E74	GC19-3988
IBM DB2 Query Monitor for z/OS	5655-V42	GC19-4142
IBM DB2 SQL Performance Analyzer for z/OS	5655-W60	GC19-4144
IBM DB2 Utilities Suite for z/OS	5655-W87	GC19-4155
IBM Tivoli OMEGAMON XE for DB2 Performance Expert on z/OS	5655-W37	GH12-6971
IBM Tivoli OMEGAMON XE for DB2 Performance Monitor on z/OS	5655-W38	GH12-6972
IBM InfoSphere Optim workload Replay for DB2 for z/OS	5655-018	GC19-4160
IBM InfoSphere Optim workload Replay for DB2 for z/OS Program Install	5655-018	GC19-4193

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***

Not applicable

***Volume orders (IVO)***

No

***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>

### **System i® Software Maintenance applies**

No

### **Variable charges apply**

No

### **Educational allowance available**

Yes. When ordering through the program number process, a 15% education allowance applies to qualified education institution customers.

Education Software Allowance Program applies when ordering through the program number process.

### **ESAP available**

Yes, to qualified customers.

### **Sub-capacity terms and conditions**

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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
5697-P46	DataQuant for z/OS	Reference-based	DB2 9 (5635-DB2) DB2 9 VUE (5697-P12) DB2 10 (5605-DB2) DB2 10 VUE (5697-P31) DB2 11 (5615-DB2) DB2 11 VUE (5697-P43)
5697-Q04	DB2 Accessories Suite for z/OS	Full machine-based	N/A
5697-DAQ	DB2 Administration Solution Pack for z/OS	Reference-based	DB2 9 (5635-DB2) DB2 9 VUE (5697-P12) DB2 10 (5605-DB2) DB2 10 VUE (5697-P31) DB2 11 (5615-DB2) DB2 11 VUE (5697-P43)

5655-DAT	DB2 Administration Tool for z/OS	Reference-based	DB2 9 (5635-DB2) DB2 9 VUE (5697-P12) DB2 10 (5605-DB2) DB2 10 VUE (5697-P31) DB2 11 (5615-DB2) DB2 11 VUE (5697-P43)
5655-W35	DB2 Buffer Pool Analyzer for z/OS	Reference-based	DB2 9 (5635-DB2) DB2 9 VUE (5697-P12) DB2 10 (5605-DB2) DB2 10 VUE (5697-P31) DB2 11 (5615-DB2) DB2 11 VUE (5697-P43)
5639-OLC	DB2 Data Access Common Collector for z/OS	Full machine-based	N/A
5655-T56	DB2 Log Analysis Tool for z/OS	Reference-based	DB2 9 (5635-DB2) DB2 9 VUE (5697-P12) DB2 10 (5605-DB2) DB2 10 VUE (5697-P31) DB2 11 (5615-DB2) DB2 11 VUE (5697-P43)
5655-DOC	DB2 Object Comparison Tool for z/OS	Reference-based	DB2 9 (5635-DB2) DB2 9 VUE (5697-P12) DB2 10 (5605-DB2) DB2 10 VUE (5697-P31) DB2 11 (5615-DB2) DB2 11 VUE (5697-P43)
5697-Q01	DB2 Path Checker for z/OS	Reference-based	DB2 9 (5635-DB2) DB2 9 VUE (5697-P12) DB2 10 (5605-DB2) DB2 10 VUE (5697-P31) DB2 11 (5615-DB2) DB2 11 VUE (5697-P43)
5655-E74	DB2 Performance Solution Pack for z/OS	Reference-based	DB2 9 (5635-DB2) DB2 9 VUE (5697-P12) DB2 10 (5605-DB2) DB2 10 VUE (5697-P31) DB2 11 (5615-DB2) DB2 11 VUE (5697-P43)
5655-V42	DB2 Query Monitor for z/OS	Reference-based	DB2 9 (5635-DB2) DB2 9 VUE (5697-P12) DB2 10 (5605-DB2) DB2 10 VUE (5697-P31) DB2 11 (5615-DB2) DB2 11 VUE (5697-P43)
5655-W60	DB2 SQL Performance Analyzer for z/OS	Reference-based	DB2 9 (5635-DB2) DB2 9 VUE (5697-P12) DB2 10 (5605-DB2) DB2 10 VUE (5697-P31) DB2 11 (5615-DB2) DB2 11 VUE (5697-P43)
5655-W87	DB2 Utilities Suite for z/OS	Reference-based	DB2 9 (5635-DB2) DB2 9 VUE (5697-P12) DB2 10 (5605-DB2) DB2 10 VUE (5697-P31) DB2 11 (5615-DB2) DB2 11 VUE (5697-P43)
5655-W37	Tivoli OMEGAMON XE for DB2 Performance Expert on z/OS	Reference-based	DB2 9 (5635-DB2) DB2 9 VUE (5697-P12) DB2 10 (5605-DB2) DB2 10 VUE (5697-P31) DB2 11 (5615-DB2)

			DB2 11 VUE (5697-P43)
5655-W38	Tivoli OMEGAMON XE for DB2 Performance Monitor on z/OS	Reference-based	DB2 9 (5635-DB2) DB2 9 VUE (5697-P12) DB2 10 (5605-DB2) DB2 10 VUE (5697-P31) DB2 11 (5615-DB2) DB2 11 VUE (5697-P43)
5655-018	InfoSphere Optim workload Replay for DB2 for z/OS	Reference-based	DB2 9 (5635-DB2) DB2 9 VUE (5697-P12) DB2 10 (5605-DB2) DB2 10 VUE (5697-P31) DB2 11 (5615-DB2) DB2 11 VUE (5697-P43)

### **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 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.

### **Sub-capacity utilization determination**

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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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To be eligible for On/Off CoD pricing, you must be enabled for temporary capacity on the corresponding hardware, and the required contract, Attachment for IBM System z On/Off Capacity on Demand (Z125-7883) must be signed prior to use.

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## **Statement of good security practices**

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IT system security involves protecting systems and information through prevention, detection, and response to improper access from within and outside your enterprise. Improper access can result in information being altered destroyed or misappropriated or can result in misuse of your systems to attack others. Without a comprehensive approach to security, no IT system or product should be considered

completely secure and no single product or security measure can be completely effective in preventing improper access. IBM systems and products are designed to be part of a comprehensive security approach, which will necessarily involve additional operational procedures, and may require other systems, products, or services to be most effective. IBM does not warrant that systems and products are immune from the malicious or illegal conduct of any party.

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## Prices

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For all local charges, contact your IBM representative.

### **IBM Global Financing**

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