IBM DB2 Universal Database for z/OS, V8 — Reengineered for e-business Leadership

Overview

Version 8 introduces a new reengineered DB2 Universal Database® (UDB) for z/OS™. DB2® continues to deliver rich function for scalable and highly available data for your enterprise-scale e-business applications. Combine the power and capacity of IBM @server zSeries™, the high performance and high availability of z/OS with this significantly enriched version of DB2 to expand and extend your applications in the increasingly competitive e-business environment.

- 64-bit virtual addressing exploits the capacity and processing power of zSeries and z/OS.
- Extensive enhancements to SQL.
- Usability and portability enhancements through major catalog changes:
  - Major improvements in long object names
  - Unicode for worldwide support and improved SQL compatibility
- DB2 family compatibility for portability of transaction applications from UNIX® and Windows® environments.
- Enhanced data availability through online schema evolution.
- Database management flexibility with:
  - Indexing enhancements
  - Variable-length indexes
  - Up to 4096 partitions and data partitioning for indexes
- Utility enhancements:
  - System-level point-in-time backup and recovery
  - Automatic restart of utilities
  - Greater DB2 family compatibility through support for load and unload with delimited data

Key Prerequisites

- z/OS V1R3 Base Services (5694-A01), or later, executing in 64-bit addressing mode
- Any processor that supports z/Architecture™

Planned Availability Date

- Information on the Version 8 availability date will be provided in an availability announcement.

At a Glance

DB2 UDB for z/OS, V8 delivers power, flexibility, and DB2 family compatibility for e-business application leadership through synergy with zSeries and z/OS.

- Enhanced capacity through 64-bit virtual addressing for DB2 and Internal Resource Lock Manager (IRLM)
- Schema evolution for enhanced data availability
- DB2 family compatible SQL for transaction processing
- Reengineered catalog including Unicode data format and long name support
- Major indexing and partitioning enhancements
- Major utility enhancements
DB2 UDB for z/OS, V8 is the largest release of DB2 ever offered. The rich content in V8 is intended to provide continuing leadership in support of traditional transaction processing while extending DB2 in the emerging arena of e-business applications. The focus for this release is on increasing the synergy with zSeries and z/OS and also on increasing compatibility of DB2 UDB for z/OS within the DB2 family.

Version 8 delivers enterprise values — high availability, scalability, performance, and capacity while also providing great SQL compatibility with DB2 UDB for Linux, UNIX, and Windows. It is now considerably easier to transfer online transaction processing (OLTP) applications and Web-oriented applications from UNIX and Windows to z/OS with the high availability, capacity, and security it provides.

Significant enhancements in SQL and optimization permit DB2 UDB for z/OS to remain a premiere choice for application development. Leading Java™ and XML technologies provide the infrastructure for Web-based applications.

**Breaking the Limits:** Version 8 addresses the real challenges you are facing today, breaking the limits in virtually all dimensions of database management:

- Virtual storage addressing expanded from 31-bit to full 64-bit addressing
- Table name sizes expanded from 18 to 128 characters
- VIEW & ALIAS names expanded from 18 to 128 characters
- Column name sizes expanded from 18 to 30 characters
- Maximum number of partitions expanded from 254 to 4096
- SQL statement length expanded from 32 kilobytes to 2 megabytes
- Index key size expanded from 255 to 2,000 characters
- Character literals expanded from 255 to 32,704 characters
- Tables in a join expanded from 15 to 225
- Active logs expanded from 31 to 93
- Archive logs expanded from 1,000 to 10,000

**Enhanced SQL for DB2 UDB for z/OS, V8** delivers transaction capabilities essential for leading-edge applications.

- Support for Common Table Expressions
- Multi-row INSERT & FETCH
- GET DIAGNOSTICS
- INSERT within SELECT
- Identity Column enhancements
- Sequences
- Dynamic Scannable Cursors
- CURRENT PACKAGE PATH
- Scalar fullselect
- Materialized Query Tables
- XML Publishing
- Unicode SQL, multiple CCSIDs in a single SQL statement

**Unicode Enhancements** deliver globalization capability and also enhance Java applications.

- Catalog data conversion to Unicode format
- Multiple CCSIDs in a single SQL
- Unicode within SQL statements and literals

**Enhancements for Continuous Availability**

- Online schema evolution, alter table attributes without stopping the application:
  - Increase column size within datatype
  - Increase length of datatype
  - Convert Char to and from Varchar
- System-level point-in-time recovery permits system recovery with a single command.
- Partitioning enhancements:
  - Data Partitioned Secondary Indexes for greater granularity of data access for reorganization and recovery
  - Dynamic partition management with rotation as well as addition of partitions
  - Partitioning without an index
  - Clustering no longer restricted to partitioning index
- More system parameters (Zparms) can be changed without stopping DB2.

**Java Enhancements:** Version 8 delivers the new Universal Java Drivers, providing a consistent Java interface across the DB2 family. The Java drivers support the JDBC/SQLJ 3.0 standard, including improvements such as:

- Savepoints
- Connection pooling improvements
- Ability to reuse PreparedStatements
- Multiple open ResultSets for a single stored procedure
- WITH HOLD cursors
- Improved BLOB and CLOB support

**Enhanced Utilities:** Full support for the extensive changes to DB2 UDB for z/OS, V8 are provided in the enhanced DB2 Utility Suite for z/OS, V8. There are several significant enhancements to the utilities as well as the support for the new catalog changes, schema evolution, partitioning enhancements, and so forth.

- Automatic restart
- System-level point-in-time backup and recovery
- REBALANCE partitions
- REORG DB2 catalog SHRLEVEL REFERENCE
- LOAD & UNLOAD delimited input and output
- RUNSTATS non-uniform statistics on non-index columns


**Accessibility by People with Disabilities**

The following features support use by people with disabilities:

- Operation by keyboard alone
- Optional font enlargement and high-contrast display settings
- Screen readers and screen magnifiers tested for use by people with visual impairment
• Speech recognition products tested for use by people
  with mobility impairment
• Optional display of audio alerts for people with hearing
  impairment

Section 508 of the U.S. Rehabilitation Act

DB2 UDB for z/OS is capable, as of January 31, 2003,
when used in accordance with IBM’s associated
documentation, of satisfying the applicable requirements
of Section 508 of the Rehabilitation Act, provided that any
assistive technology used with the product properly
interoperates with it.

Product Positioning

DB2 UDB for z/OS is the super-server of choice for the
twenty-first century providing enterprise-wide data
management for e-business, business intelligence, CRM,
and ERP applications such as Siebel, Vantive, Baan,
PeopleSoft, and SAP R/3, and operational transaction
processing. It offers large data capacity, high transaction
performance, and extensive connectivity. It works with
the DB2 UDB family to bring a full relational solution to
the market place. DB2 supports transactions arising from
Web servers, CICS®, IMS™ transaction management,
MVS™ batch jobs, and via distributed connections from
remote clients on numerous platforms.

DB2 UDB Server for z/OS is the relational database
server solution for z/OS. It combines the power and
reliability of DB2 with additional features such as:

• DB2 Extenders®:
  – Text
  – Audio, Video, Image
  – XML
  – Net Search

• Net.Data®

• DB2 Management Clients Package, including:
  – DB2 Control Center
  – DB2 Administration Server
  – DB2 Development Center
  – Visual Explain

Reference Information

Refer to Software Announcement 203-020, dated

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United States and other countries.

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trademarks or service marks of others.
Technical Information

Hardware Requirements

Processors: DB2 Universal Database® (UDB) for z/OS™, V8 operates on any processor that supports z/Architecture™, including z800 and z900, or comparable processor. The processor must have enough real storage to satisfy the combined requirements of:

- DB2®
- z/OS
- Other customer-required applications

In addition, 64-bit virtual addressing support will probably require increased real storage for a workload compared to DB2 for z/OS and OS/390® V7.

The requirement for 64-bit addressing means that z/OS Bimodal Migration Accommodation software cannot be used with DB2 V8.

The configuration must include sufficient I/O devices to support the requirements for system output, system residence, and system data sets. Sufficient disk storage must be available to satisfy the users’ information storage requirements and can consist of any direct-access facility supported by the system configuration and the programming system.

In addition to listing auxiliary storage and data communications devices, this section identifies function-dependent hardware requirements and virtual storage requirements.

Auxiliary Storage

DB2 is independent of both disk and tape device type. The customer can use any magnetic, optical, or tape device that is supported by the data facilities component of z/OS for the DB2 data sets.

The following DB2 data sets are supported by the following device types:

- Active recovery log data sets: Disk
- Archive recovery log data sets: Disk, tape
- Image copy data sets: Disk, tape
- Bootstrap data sets: Disk
- User data sets: Disk
- DB2 catalog data sets: Disk
- Work data sets (for utilities): Disk, tape

If these data sets are on a disk that is shared with other z/OS systems, the customer should use global resource serialization to prevent concurrent access by more than one z/OS system.

The minimum disk space requirement, based on installing DB2 using the panel default values, is approximately 1 GB. Users need additional disk space for their data.

If the customer uses dual logging and tape for the log archiving device, the customer needs at least two tape drives.

Data Communications Devices

DB2 operations can be controlled from:

- The system console
- Authorized IMS/ESA® Transaction Manager terminals
- Authorized CICS® terminals
- TSO terminals (by authorized users)

For information about the data communication devices supported by IMS/ESA Transaction Manager, CICS, and TSO, refer to the documentation for these products.

Software Requirements: This section lists licensed programs, or specific elements and features of licensed programs, that are required in the DB2 UDB for z/OS, V8 environment. You can use subsequent versions or releases of the programs, unless stated otherwise. This section also identifies the requirements that are associated with specific DB2 capabilities, as well as optional programs that you can use with DB2 UDB for z/OS, V8.

Refer to the following Web sites for the most current information:


Operating System and Support Programs

DB2 UDB for z/OS, V8 requires the function that is provided by the following licensed programs or their equivalents; subsequent versions or releases of any product are acceptable.

- z/OS V1.3 Base Services (5694-A01) with the following optional elements:
  - DFSMS
  - z/OS V1.3 Security Server (RACF®)
- IRLM V2.2 for DB2 V8

Virtual Storage Requirements

The amount of space needed for the common service area (CSA) below the 16 MB line is less than 40 KB for each DB2 subsystem and 24 KB for each IRLM. High concurrent activity, parallelism, or high contention can require more CSA.

Most of the DB2 common data resides in the extended common service area (ECSA). Most modules, control blocks, and buffers reside in the extended private area.
Function-Dependent Program Requirements

The following functions of DB2 require specific licensed programs, or features of licensed programs, before they can be used:

- **Application Execution**: Applications written in high-level programming languages, such as applications or stored procedures written in the C language and using the ODBC or CLI interfaces to DB2, require the Application Enablement Services element of z/OS at runtime. Applications or stored procedures written in Java™ such as those using the JDBC or SQLJ interfaces to DB2, require IBM Developer Kit for OS/390, Java 2 Technology Edition (5655-D35) at run time.

- **Extenders**:
  - **Audio, Image, Video and Extenders**: Use of these extenders requires Language Environment®, which is part of the Application Enablement Services element of z/OS.
  - **XML Extender**: Use of the XML Extender requires Language Environment, which is part of the Application Enablement Services element of z/OS, as well as the IBM XML Parser for z/OS, C++ Edition, to be available at runtime. The required parser is provided with Release 3 of the XML Toolkit for z/OS and OS/390 (5655-D44). Use of either the XMLFile type or the “Getting Started” material requires the z/OS UNIX® System Services element of z/OS to be available.
  - **Text Extender**: The DB2 Connect® product provides an optional administration client for the DB2 Text Extender. A license for one of the following products is required for this capability:
    - DB2 Connect Personal Edition, V7.2 (20P5257)
    - DB2 Connect Personal Edition, V7.2 (5648-D40)
    - DB2 Connect Enterprise Edition, V7.2 (5648-D42)

Optional Program Requirements

The following functions are enabled in conjunction with the specified optional licensed programs when used together with DB2.

- **DRDA® Connectivity**: DB2 UDB for z/OS, V8 supports the following IBM relational database products:
  - DB2 UDB for Linux, UNIX, and Windows® V8
    - DB2 Enterprise Server Edition (ESE) V8.1 (5765-F41)
    - DB2 Workgroup Server Edition V8.1 (5765-F35)
    - DB2 Workgroup Server Unlimited Edition V8.1 (5765-F43)
    - DB2 UDB Universal Developer’s Edition V8.1 (5765-F34)
  - DB2 UDB for Linux, UNIX, and Windows V7
    - DB2 Universal Developer’s Edition (5648-D37)
    - DB2 Enterprise Edition (5648-D48)
    - DB2 Enterprise Extended Edition (5648-D50)
    - DB2 UDB Workgroup Edition (5648-D46)
    - DB2 Workgroup Unlimited Edition (5648-D46)
  - DB2 UDB for iSeries™ OS/400® V5.1 (5722-SS1)
    - DB2 UDB Extenders for iSeries V7.2 (5722-DE1)
    - DB2 DataPropagator™ for iSeries V8.1 (5722-DP4)
    - DB2 Query Manager and SQL Development Kit for iSeries (5722-ST1)
  - DB2 Server for VSE & VM V7 (5697-F42)
  - Any other DRDA-compliant client or relational DBMS server

- **Web Connectivity**: The following products provide connectivity to DB2 UDB for z/OS V8 from the Web:
  - WebSphere® Application Server V4 (5655-F31)
  - Net.Data® for z/OS V7, a feature of DB2 UDB for z/OS, V8

- **Capacity Planning**: DB2 Estimator for Windows works with DB2 data to estimate application feasibility, to model application cost and performance, and to estimate required CPU and I/O capacity. DB2 Estimator is available to download from the DB2 for z/OS Web page.

For more information on DB2 Estimator for Windows, view:

http://www.ibm.com/software/data/db2/os390/estimate/

- **Transaction Management**: The following transaction management products work with DB2:
  - Information Management System (IMS™)
    - IMS V8 (5655-C56)
    - IMS V7 (5655-B01)
  - Customer Information Control System (CICS)
    - CICS Transaction Server for z/OS V2.2 (5697-E93) or later
    - CICS Transaction Server for OS/390 V1.3 (5655-147)
  - WebSphere MQSeries® for OS/390
    - WebSphere MQSeries for OS/390 V5.2 (5655-F10)

- **Query Support**: The following query programs work with DB2:
  - DB2 Extenders® for Text, Audio, Video, Image, and XML, which are elements of DB2 UDB for z/OS, V8

- **Data Warehouse Support**: The following product provides warehouse management for DB2:
  - DB2 Warehouse Manager for z/OS V8 (5655-I61)

- **Application Development Tools and Programming Languages**: The DB2 Development Center, which is part of the Software Developer’s Kit (SDK) on Windows, AIX®, and Solaris is delivered with all editions of DB2 UDB and DB2 Connect products.

DB2 Development Center provides a graphical application that supports rapid development and deployment of DB2 Stored Procedures.

The following application development tools and programming languages work with DB2:

- **Assembler**: High Level Assembler, part of the System Services element of z/OS

- **C/C++**: Any of the following:
  - C/C++ (with or without Debug Tool), part of the Application Enablement Services optional feature of z/OS
  - C/C++ for MVS/ESA™ V3.2 (5655-121)
  - SAA® AD/Cycle® C/370™ Compiler V1.2 (5688-216)
Use of the DB2 Precompiler Services with C requires
the DB2 Coprocessor provided with z/OS.

Use of the DB2 Precompiler Services with C++
requires the DB2 Coprocessor provided with z/OS V1.5

- **COBOL:** Any of the following:
  - ENTERPRISE COBOL V3.2 (5655-G53)
  - IBM COBOL for OS/390 and VM V2.2 (5648-A25),
    optionally, with VisualAge COBOL Enterprise V2.2
    (04L6579)

- **Fortran:** VS Fortran V2.6 (5668-806, 5668-087, or
  5668-805)

- **Java:** Applications or stored procedures written in
  Java, such as those using the JDBC or SQLJ interfaces
to DB2, require IBM Developer Kit for OS/390, Java 2
  Technology Edition (5655-D35) at run time.

**Program Requirements:** IBM SDK for z/OS, Java 2
Technology Edition, V1.4.1 (5655-I56)

For more information on Java 2 for OS/390 and z/OS,
including a link to software prerequisites, view:

- **PL/I:** Any of the following:
  - IBM Enterprise PL/I for z/OS and OS/390 V3
    (5655-H31)
  - VisualAge PL/I for OS/390 V2.2 (5655-B22)

Use of the DB2 Precompiler Services requires the DB2
Coprocessor provided with IBM Enterprise PL/I for
z/OS and OS/390 V3.1, or later.

- **REXX:** Any of the following:
  - IBM TSO Extensions for MVS REXX, which is part
    of z/OS

- **SQL Procedure Language:** A C language compiler is
  required on z/OS to develop stored procedures using the
  SQL procedure language.

**Operational Support:**

The following programs provide operational support for DB2:

- **DFSMS features, part of the Systems Management
  optional feature of z/OS, specifically:**
  - DFSMSShsm™ for archiving
  - DFSMSdss™ for concurrent copy in utilities

- **IBM Softcopy Reader or Library Readers, which are
  included on the CD-ROMs for BookManager® books**

- **IBM Tools for Database Application, Recovery,
  and Replication Management**

Refer to the IBM Data Management Tools Web site for a
current list of products.

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

- **The IBM Tools for Database Recovery and Replication
  Management, including the following tools:**
  - DB2 DataPropagator for z/OS V8 (5655-I60)
  - IMS DataPropagator for z/OS V3 (5655-E52)
  - IBM Recovery Tool for IMS and DB2 Databases
    V1.2 (5697-F56)
  - DB2 Row Archive Manager for OS/390 (5655-E65)
  - DB2 Archive Log Compression Tool for z/OS V1.1
    (5655-F54)
  - DB2 Change Accumulation Tool for z/OS V1.2
    (5655-F55)
  - DB2 Object Restore for z/OS V1.2 (5655-E72)
  - DB2 Diagnostic and Recovery Utilities for OS/390
    and z/OS V7.1 (5655-E62)
  - IBM Log Analysis Tool for z/OS V1.2 (5655-E66)
  - DB2 Recovery Expert for Multiplatforms V1
    (5724-B91)

- **The IBM Tools for Database Application Environments
  (Application Management), including the following tools:**
  - DB2 Bind Manager for z/OS V2.1 (5655-E43)
  - DB2 Web Query Tool for z/OS V1.3 (5655-E71)
  - DB2 Web Query Tool for Multiplatforms V1.3
    (5724-B34)
  - DB2 Web Query Tool for iSeries V1.3 (5697-G85)
  - DB2 Data Export Facility for z/OS V1 (5655-E46)
  - DB2 Path Checker for z/OS V1.2 (5655-E39)
  - DB2 Table Editor for z/OS V4.3 (5697-G65)
  - DB2 Table Editor for Multiplatforms V4.3 (5724-B33)

**Database Administration and Systems Management Support:**

The following tools support database administration and systems management and application
development for DB2:

- **The DB2 Management Clients Package, which is a
  feature of DB2 UDB for z/OS, V8 that includes:**
  - DB2 Administration Tools:
    - DB2 Control Center
    - DB2 Replication Center
    - DB2 Administration Server
  - DB2 Development Center
  - DB2 for z/OS Visual Explain

The DB2 Administration Tools and DB2 Development
Center are delivered with all editions of DB2 UDB and
DB2 Connect products. A restricted-use copy of DB2
Connect Personal Edition V8.1 (5724-B56) for Windows
is provided in the DB2 Management Clients Package
feature of DB2 UDB for z/OS, V8 to satisfy this
functional dependency.

- **IBM Tools for Database Administration**

Refer to the IBM Data Management Tools Web site for a
current list of products.

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

- **The IBM Tools for Database Administration, including
  the following tools:**
  - DB2 Administration Tool for z/OS V4.1 (5655-I23)
  - DB2 High Performance Unload for z/OS V2
    (5655-I19)
  - DB2 High Performance Unload for Multiplatforms
    V2 (5724-B90)
The IBM Tools for Database Performance Management, including the following tools:

- DB2 Performance Monitor for z/OS V7 (5655-E61)
- DB2 SQL Performance Analyzer for z/OS V2 (5655-I22)
- DB2 Performance Expert for z/OS V1 (5655-I21)
- DB2 Performance Expert for Multiplatforms V1 (5724-B92)
- DB2 Query Monitor for z/OS V1.1 (5655-E67)
- DB2 Buffer Pool Analyzer for z/OS V1.1 (5655-E54)

Requirements for Dependent Functions of DB2: DB2 UDB for z/OS, V8 includes the following features, some of which have requirements of their own, above and beyond what the base DB2 product requires. This section identifies the requirements for using these features, but does not repeat the requirements for DB2 UDB for z/OS, V8.

Recommendation: Before using these features, refer to the installation information for these features to ensure you have all required and recommended products.

System Level Point-in-Time (PIT) Backup and Recovery

- z/OS V1.5
- DFSMSHsm
- DFSMSdss

Multilevel Security with Row Granularity (MLS)

- z/OS V1.5 RACF
- z/OS V1.5

Group Bufferpool (GBP) Caching z/OS

- z/OS V1.4
- Coupling Facility (CF) level 12

Visual Explain: An element of the DB2 Management Clients Package, which is a feature of DB2 UDB for z/OS, V8.

Hardware Requirements: Visual Explain requires:

- A workstation that is capable of running Windows
- A monitor that is capable of displaying 1024-by-768 resolution
- Approximately 100 MB of disk space
- 256 MB memory, or greater

Program Requirements: Visual Explain can run in either of the following environments:

- Microsoft® Windows 2000/XP or Windows NT® V4.0 (Service Pack 6 or above)
- DB2 Connect

DB2 Connect Personal Edition V8 must be installed on the workstation hosting Visual Explain or the DB2 Client Application Enabler (CAE) V8 must be connected to the DB2 Connect Enterprise Edition V8.

Visual Explain includes a browser that lets users view current values of subsystem parameters. To use this browser, your DB2 for z/OS subsystem must have the DSNWZP stored procedure enabled.

Net.Data V7: A feature of DB2 UDB for z/OS, V8, it has the following requirements:

Program Requirements: Net.Data requires an HTTP server to be installed on the same server as Net.Data. To configure Net.Data to execute as a Servlet, the WebSphere Application Server for z/OS and OS/390 V4 (5655-F31) is required.

msys for Setup DB2 Customization Center: It is enabled for the IBM Managed System Infrastructure (msys). The msys for Setup DB2 Customization Center provides installation customization for DB2 z/OS. DB2 Customization Center is available as a plug-in for msys for Setup and therefore requires msys for Setup, which is included with z/OS V1.3.

In addition, msys for Setup has three components:

- msys for Setup workplace, which runs on the workstation
- msys for Setup host code, which runs on a driving system
- msys for Setup management directory, which uses an LDAP server

Refer to the msys Installation Guide (SC33-7997).

Compatibility

DB2 UDB for z/OS, V8: This product is upwardly compatible with earlier releases of DB2 for z/OS and OS/390. Migration with full fallback protection is available for customers running on DB2 UDB for z/OS and OS/390, V7. Thus, existing customers should ensure they are successfully running on DB2 UDB for z/OS and OS/390, V7 before migrating to DB2 UDB for z/OS, V8.

User Group Requirements: This announcement satisfies or partially satisfies 111 requirements from one or more of the worldwide user group communities. Groups include Australasian SHARE/GUIDE (ASG), COMMON, COMMON Europe, GUIDE International, G.U.I.D.E. Europe, Japan GUIDE/SHARE (JGS), Guide Latin American (LAG), SHARE EUROPE, and SHARE Incorporated. Requirements satisfied include:

- FR007 — Add a partition
- FR035 — Unbundle clustering from partitioned index
- FR045 — Prior point-in-time recovery automation
- FR097 — Change clustering index
- FR107 — Alter table column data type
- FR116 — Add a column to an existing index
- MR00023580 — Alter table column data type
- MR00023584 — Permit partition restructure without recreating tablespace
- MR00031810 — Change clustering index
- MR00037642 — Provide dynamic ZPARM update capability
- MR00037895 — Use index bidirectional
- MR00037955 — Ability to add a partition
- MR00039026 — DB2 system parameters: dynamic reconfiguration
- MR00039330 — New partition without recreate
-5- 203-019
MR0917012917 — Support “GROUP BY” clause with a function or expression
MR091800551 — Precompiler support of codepages other than 1047
MR0918005817 — Release write claims on cursors with hold
MR1005003945 — Addition of scalar fullselect to DB2 UDB for OS/390
MR1017016637 — Delete orphan records from SYSLGRNX
MR1019005352 — Increase maximum length of character constant
MR1024005542 — Increase DSNTEP2 buffer (MAXARRY)
MR1029016954 — DDF member routing to specific member
MR1117002951 — LOB VIPs — COBOL or PL/I
MR112700584 — QUERYNO clause for INSERT with VALUES clause is missing
MR120302549 — CREATE INDEX DEFER YES improvements
OR1220026117 — IFCID record should not be truncated at 5000 bytes

Planning Information

Customer Responsibilities: Customers should review the sections in this announcement that describe the hardware and software dependencies for DB2 UDB for z/OS, V8.

DB2 UDB for z/OS, V8 has support for migration from V7. Customers not yet on V7, should plan to migrate to DB2 UDB for z/OS and OS/390, V7 as preparation for a migration to V8.

Migration Considerations: IBM added many universal database capabilities in DB2 UDB for z/OS, V8 and deprecated support for some functions. As you prepare to migrate your subsystems, you should be aware of the following changes:

- Net.Data has been stabilized as of V7. WebSphere is the strategic IBM solution for delivering DB2 data to Web applications. V7 of Net.Data may be ordered as a feature of DB2 UDB for z/OS, V8 to provide stability and compatibility during application transition from Net.Data to a WebSphere Application Server environment.
- Workload Manager (WLM) managed stored procedure address spaces is the strategic solution for stored procedure support in DB2 UDB for z/OS. DB2 managed stored procedure spaces do not support all of the SQL enhancements and capabilities of DB2 UDB for z/OS, V8. Migration to WLM managed stored procedure spaces is recommended to obtain the full stored procedure capability of DB2 UDB for z/OS, V8.
- DRDA is the strategic solution for network computing support in DB2 UDB for z/OS. IBM has no plans for additional private protocol enhancements. DRDA replaces the private protocol access. Private protocol does not support stored procedures or TCP/IP, both of which are available with DB2 for OS/390, V5 and above. Private protocol also does not support network computing enhancements in V6, V7, and V8. Conversion of private protocol applications to DRDA is recommended to obtain the full network computing capability of DB2 UDB for z/OS, V8.

For more detailed information on migrating to V8, refer to the DB2 UDB for z/OS, V8 Installation Guide (GC26-9636).

Installability: Customers should refer to the Program Directory shipped with the product.

Packaging: The DB2 UDB Server for z/OS, except as noted below, will be shipped on 3480 cartridges.

Also included will be a program directory, and under separate cover, one copy of the entitled publications.

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The workstation client functions of DB2 Management Clients Package will be shipped on CD-ROM.

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Security, Auditability, and Control

DB2 UDB for z/OS, V8 uses the security and auditability features of the host z/OS systems. It also provides facilities for the protection and control of its resources. These facilities include controls for:

- System access
- Data access and control
- Concurrent access
- Data recovery
- Accounting

Ordering Information

Ordering instructions and order processing availability will be communicated when IBM announces general availability of this product.

Terms and Conditions

Licensing: IBM Customer Agreement

Variable Charges Apply: No

Parallel Sysplex® License Charge (PSLC) Applies: Yes

Location License Applies: No

Usage Restriction Applies: No

Entry End User/390 Attachment Applies: No

Educational Allowance: Yes, 15% education allowance applies to qualified education institution customers.
Limited-Use License for DB2 Connect: The DB2 Management Clients Feature provides a restricted-use copy of DB2 Connect V8. Authorization to use this copy of DB2 Connect is to enable access to DB2 for z/OS data by the following workstation tools only:

- DB2 Administration Server
- DB2 Control Center
- DB2 Development Center
- Visual Explain

For all other remote connections to DB2 for z/OS provided through DB2 Connect, or for any use of DB2 Connect not specifically described above, you must obtain a separate license for DB2 Connect from IBM.

Warranted: Yes

Licensed Program Materials Availability

- Restricted Materials of IBM: None
- Non-Restricted Source Materials: None
- Object Code Only (OCO): All

Program Services

- Support Center applies: Yes, access is available through the IBM Support Center.
- Available until discontinued: 12 months’ written notice.
- APAR Mailing Address:
  IBM Corporation
  APAR Processing
  555 Bailey Avenue
  San Jose, CA 95141

IBM Operational Support Services — Support Line: Yes

Prices

Prices will be communicated when IBM announces availability of this product.

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