

DB2 9 for z/OS - Summary of News

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DB2 9 for z/OS

GA 16.03.2007

- Rich hybrid data server support for both relational and pureXML storage, with the necessary services to support both data structures.
- New data types (DECFLOAT, BIGINT, and VARBINARY)
- Native SQL procedural language. (ZIIP eligible)
- Improved security with roles, trusted context, and new encryption functions
- Extensions of DB2 for z/OS V8 capabilities to make changes to the data.
- Enhancements to large object support and performance.
- Volume-based copy and recover
- Refinements to the DB2 industry-leading optimization
- Virtual Indexes for testing the effect of creating or dropping indexes (SYSIBM.DSN_VIRTUAL_INDEXES Table, see DSNTESC Member in DSNAMP)
- Index usage by Dynamic SQL (SYSIBM.SYSINDEXSPACESTATS (Column LASTUSED)
 - Updated by RUNSTATS Utility
- QMF interface design changes that provide on demand access to data, reports, and interactive visual solutions with optional Web browser
- Enablement for IBM System z Integrated Information Processors (ZIIP)
- Index Compression
 - Without a dictionary
 - Page level compression
 - Compression on disk
 - No compression in buffer pool, log
 - Large index page sizes
- Some selected Details:
 - SHRLEVEL(REFERENCE) for REORG of LOB table spaces
 - Online RENAME COLUMN
 - Online RENAME INDEX
 - Online CHECK DATA and CHECK LOB
 - Faster REORG by intra-REORG parallelism
 - More online REORG by eliminating BUILD2 phase
 - LOB Lock reduction
 - Skipping locked rows option
 - Online REBUILD INDEX
 - Change SCHEMA & VCAT
 - Tape support for BACKUP and RESTORE SYSTEM utilities
 - Recovery of individual tablespaces and indexes from volume-level backups
 - Enhanced STOGROUP definition
 - Utility TEMPLATE switching
 - Conditional restart: automatic search for appropriate checkpoint
 - CLONE Table: fast replacement of one table with another
 - Buffer management by WLM
 - Global query optimization
 - Generalizing sparse index and in-memory data caching method
 - Optimization Service Center
 - Autonomic reoptimization
 - Logging enhancements
 - LOBs Network Flow Optimization
 - Faster operations for variablelength rows
 - NOT LOGGED table spaces
 - Index on expressions
 - Universal Table spaces
 - Partition-by-growth table spaces
 - APPEND option at insert
 - Autonomic index page split
 - Index page sizes 8K, 16K, 32K
 - Support for optimistic locking
 - Faster and more automatic DB2 restart
 - MODIFY RECOVERY enhancements

- RLF improvements for remote application servers such as SAP
- Preserving consistency when recovering individual objects to a prior point in time
- DECIMAL FLOAT, BIGINT
- VARBINARY, BINARY
- TRUNCATE TABLE statement
- MERGE statement
- FETCH CONTINUE
- ORDER BY and FETCH FIRST n ROWS in sub-select and full-select
- ORDER OF extension to ORDER BY
- Various scalar functions
- XML support in DB2 engine
- Native SQL Stored Procedures, able to use zIIP
- SELECT FROM UPDATE/DELETE/MERGE
- Enhanced CURRENT SCHEMA
- IPv6 support
- Unified Debugger
- Network Trusted Context
- Database ROLES
- Automatic creation of database objects
- Modify early code without requiring an IPL
- Utilities CPU reduction
- Temporary space consolidation
- And more...