## Six new Db2 capabilities DBAs must try today with Db2 11.5.9



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In late 2023, IBM® introduced Db2® version 11.5.9, a significant update packed with new features and improvements to enhance your database management experience. From expanded table maintenance capabilities to simplified disaster recovery setups to streamlined watsonx.data™ integration, this release aims to empower database administrators (DBAs) with greater efficiency and flexibility.

Let's take a closer look at these top new capabilities brought by Db2 11.5.9 and how they can benefit your database operations.

### 1. Automatic table maintenance (ATM) extension beyond base tables

ATM users can now evaluate the need for index reorganization beyond base tables. Support is now extended to partitioned tables, multidimensional clustering tables (MDC) and insert time clustering tables (ITC).

#### 2. Db2 pureScale improved CF performance

Db2 pureScale® users can now increase the number of QE queues by setting the DB2\_CF\_SERVER\_CACHE\_STOCLASS\_NUM\_QE\_QUEUES environment variable. This increase in queues reduces contention and improves the performance of the cluster caching facility.

# 3. Integrated disaster recovery with Db2 pureScale on AWS Marketplace (Db2 pureScale on RHEL, Db2 pureScale on SLES)

Users of pureScale on AWS can now set up HADR across different availability zones in the same region with a single click. In addition, the steps for adding a member to a pureScale cluster and expanding an existing file system by adding a disk are now automated.

#### 4. New enhanced security capabilities

Transport Layer Security (TLS) 1.2 is now the default TLS version when TLS is used to encrypt communication. TLS 1.0 and 1.1 are no longer enabled by default. When using Db2 Coordinated Transactions (2-phase commit) between Db2 database systems, a TCP/IP connection is needed to support resynchronization communication. This can lead to corporate security exceptions due to policies requiring TLS connections for all client-server communication. Now, with Db2 11.5.9, the TCP/IP listener can be configured to start in restricted mode to prevent remote Db2 client connections.

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Db2 11.5.9 also extends the masking capabilities through the introduction of a new scalar function DATA\_MASK() built using the IBM Research Next Generation Data Masking Engine (Magen) Library. This scalar function can mask data through redaction, partial redaction, substation and obfuscation techniques. When combined with the existing Row Column Access Control (RCAC) capabilities of Db2, it provides additional ability to obfuscate sensitive data when queried by those without permission to view the actual data itself.

## within Db2 for operational analytics

Db2 Warehouse integrates directly with data residing in the data lake for analytics through support for Iceberg open table format and native watsonx.data integration. Use the watsonx.data lakehouse engine to cleanse and transform Db2 and 3rd party data sources, reducing complexity and time to prepare data for model training. Easily bring lakehouse data back to your warehouse as part of your curated data set, ready for reporting, operational analytics and mixed workloads. Db2 can also integrate with watsonx.data through federation. Starting in Db2 11.5.9, IBM watsonx.data is now a supported federation data source, including enhanced data type mapping, function push-down and server attributes optimization. All these ensure optimal performance when leveraging federation to query your data in the data lake.

## 6. Remote storage (object store) support now available on more Linux platforms

The remote storage feature is now supported in Ubuntu 22.04, RHEL 9.2 (Linux 64-Bit, x86-64), RHEL 8.8 (Linux 64-Bit, POWER Little endian) and 11.5.9 continuous special build stream, starting with build ID s2312141118 and later for Linux 64-bit, System Z.

#### Download Db2 Community Edition— 11.5.9

Don't miss the opportunity to experience these benefits firsthand. Take the next step in optimizing your database operations by downloading Db2 Community Edition—version 11.5.9 today, and unlock a new level of efficiency and functionality for your organization.

**Author** 



Mike Springgay

#### STSM Db2 Architect

