

## IBM WebSphere Information Integrator Version 8.2 —Event Publisher for DB2 Universal Database for z/OS —Replication for z/OS

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### Highlights

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- **Support business continuity and workload distribution across IBM DB2 Universal Database (UDB) instances**
- **Synchronize mainframe DB2 UDB data with distributed DB2 UDB, Oracle, Informix, Sybase, Microsoft SQL Server and Teradata-based applications**
- **Manage data distribution and consolidation between headquarters and retail or branch sites**
- **Deliver more current data to data warehouses for tactical decision making**
- **Initiate business processes based on DB2 UDB changed-data events**

### IBM WebSphere Information Integration

Organizations face an information challenge. Where is it? How do I get it when I need it in the form I need? What does it mean? What insight can I gain from it? Can I trust it? How do I control it? The list goes on, and the challenges grow unceasingly if businesses cannot ensure that they have access to authoritative, consistent, timely and complete information.

The IBM WebSphere® Information Integration platform integrates and transforms any data and content to deliver information you can trust for your critical business initiatives. It provides breakthrough productivity, flexibility and performance, so you and your customers and partners have the right information for running and growing your businesses. It helps you understand, cleanse and enhance information, while governing its quality to ultimately provide authoritative information. Integrated across the extended enterprise and delivered when you need it, this consistent, timely and complete information can

enrich business processes, enable key contextual insights and inspire confident business decision-making.

### Distribute, Consolidate And Synchronize Information

The complexity of today's computing environment is staggering. Whether measured by the number of databases, the pace of new application deployment, the drive toward real-time business intelligence or the demanding service-level requirements, IT organizations have their hands full. Each new application brings not only its own data, but some that may overlap with data in other application domains and therefore must be synchronized. Business intelligence must now support tactical decisions based on real-time data. And businesses are driven to increase redundancy not only for availability, but also for regional performance and low-cost capacity. IBM WebSphere Information Integrator replication and event publishing offerings for DB2® Universal Database for the IBM z/OS® operating system address these requirements.

## Two Replication Architectures Meet Your Needs

IBM WebSphere Information Integrator Replication for z/OS, V8.2 supports two styles of asynchronous log-based replication. First, it supports a queue-based replication architecture for high volume, low latency and managed conflict detection and resolution. This enables backup systems to be productive and geographically dispersed systems to share application workloads. This architecture currently supports replication among DB2 UDB instances on Linux®, UNIX®, Microsoft® Windows®, and IBM z/OS platforms. On the distributed platforms, replication support for high availability massively parallel processing (MPP) configurations using the DB2 Database Partitioning Feature is supported; replication automatically merges the logs from partitioned databases to help ensure data consistency. In addition, on distributed platforms, the queue-based replication architecture supports Oracle, Sybase, Microsoft SQL Server, and Informix as targets for data apply.

WebSphere Information Integrator Replication Edition for z/OS' queue-based replication capabilities include:

- *Committed changes are published to IBM WebSphere MQ message queues. A sophisticated apply engine determines transaction dependencies and replays transactions on target systems to maximize parallelism and minimize latency*
  - *Conflict detection and resolution features allow backup systems to do productive work so that application workload can be distributed across multiple servers*
  - *Data can be filtered so that only the data of interest is replicated*
  - *Stored procedures can be invoked by the apply process so that data can be transformed as it is replicated*
- Alternatively, the SQL replication architecture maximizes flexibility in managing scheduling, transformation and distribution topologies for populating warehouses or marts, maintaining data consistency between applications or efficiently managing distribution and consolidation scenarios among headquarters and branch or retail sites. Working with WebSphere Information Integrator Replication Edition or Standard Edition for Linux, UNIX and Microsoft Windows, replication among mixed relational databases is supported. Key features include:
- *Data can be distributed from one database to many and consolidated from many databases to one*
  - *Data can be filtered either horizontally or vertically*
  - *Transformation can be performed in-line via standard SQL or stored procedures*
  - *Data movement can be automated on a specific schedule, at designated intervals, continuously, or be event-driven*
  - *Data movement can be managed table-at-a-time, such as for warehouse loading during batch windows or with transaction consistency for data that is never offline*

Regardless of the replication approach, your administrators can use a wizard-driven graphical user interface (GUI), command-line processor and/or script-driven processes to configure the replication environment. Integrated monitoring and statistics make it easier to react to problems and maintain system health.

## Data Event Publishing Facilitates Business Integration

WebSphere Information Integration event publishing makes it easy to link data events with business processes. It is available with both WebSphere Information Integrator Replication for z/OS and WebSphere Information Integrator Event Publisher for DB2 Universal Database for z/OS. It interoperates with similar capabilities provided by the WebSphere Information Integrator Classic Event Publisher family of products, which supports IBM IMS™ (Information Management System), VSAM (Virtual Storage Access Method), Computer Associates Advantage CA-IDMS/DB, and Software AG Adabas.

## Changed-data Events Accelerate Data Warehousing, Enterprise Integration

Event publishing provides efficient changed-data publishing environments for the following scenarios:

- *Application-to-application integration—Changed-data event publishing makes it possible to push operational customer data to a packaged customer relationship management (CRM) application*
- *Business process initiation—Changed-data event publishing allows a customer record to initiate a welcome e-mail, credit verification and an update to the CRM system*
- *Critical data event monitoring—Changed-data event monitoring allows events such as low inventory levels to trigger a process such as product restocking workflow*
- *Data population—Changed-data event publishing can feed a data warehouse, data mart or operational data store by pushing changed data to an extract, transform and load (ETL) product that then populates the data store*

## Robust, Real-time Changed-data Capture

WebSphere Information Integration event publishing captures data changes and then publishes them to WebSphere MQ as self-describing XML messages. These changed-data “events” can then be used by WebSphere application and process integration middleware or by a Java™ Message Service-aware application, tool or message broker to drive subsequent processing. This loosely coupled integration

ensures that each application can be changed independently of every other application.

WebSphere Information Integrator Event Publisher for DB2 UDB for z/OS complements and extends client investments in service-oriented architecture, enterprise application integration and extract-transform-load (ETL) infrastructure by:

- *Eliminating the hand coding typically required to detect data changes*
- *Removing data event capture overhead from the transaction path itself*
- *Providing a single integration point—the source data—for data events that may be initiated by multiple applications, making the data event capture independent of the applications and their evolution*
- *Making the data integration independent of the structure or processing flow of the applications involved*
- *Reducing latency for legacy data delivery through ETL tools*

## For More Information

To learn more about the technologies and products behind IBM information integration solutions, contact your IBM marketing representative or IBM Business Partner, or visit [ibm.com/software/data/integration](http://ibm.com/software/data/integration).



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