IBM InfoSphere Classic Federation Server for z/OS, V9.5: Federating mainframe data

Highlights

- ***Connects mainframe data with the Internet, client/server tools or applications and IBM InfoSphere Information Server***
- ***Extends the value of existing mainframe investments without requiring mainframe programming***
- ***Accelerates project time to value for enterprise integration, data warehousing and e-business***
- ***Minimizes dependence on scarce mainframe skills while leveraging ubiquitous SQL skills***

Legacy asset integration—a critical component of your integration infrastructure

If your computing environment includes the mainframe, it is important that you have an information infrastructure that helps you leverage the power of the critical data that resides on your mainframe. IBM® InfoSphere Information Server and its companion products provide critical components for your IBM z/OS® integration infrastructure.

IBM InfoSphere® Classic Federation Server for z/OS provides high-performance, dynamic access to mainframe data sources driven by standardized structured query language (SQL). The result is robust mainframe integration that addresses the needs of today's on demand environments.

Leverage legacy assets to speed time to market

InfoSphere Classic Federation Server empowers real-time integration of your z/OS data with UNIX®, Microsoft® Windows® and Linux® platforms for Internet, client/server and desktop environments. It provides robust read/write data access and federation with transaction speed and enterprise scale. Using a metadata-driven approach, it dynamically translates SQL select/insert/update/delete statements into native data access commands that are optimized for each data source. Results are reformatted into standard relational row-column answer sets. The result is seamless integration of mainframe data without specialized or proprietary programming.

Designed for enterprise workloads

Dynamic data integration is viable only if it handles your workload. InfoSphere Classic Federation Server accesses mainframe data at transaction speed so that Web sites can service thousands of users and transactions per second. InfoSphere Classic Federation Server has proven that it can handle large z/OS throughput requirements.

Building applications using InfoSphere Classic Federation Server requires no mainframe programming and no legacy database skills. SQL-literate application developers using their existing development, reporting and portal tools are productive immediately—building everything from a simple read-oriented, customer self-service Web site to a complex multi-database read/write e-commerce solution.

Reliable operational platform

The InfoSphere Classic Federation Server solution:

- *Accepts and validates SQL statements from a server, client or desktop tool or application*
- *Communicates the SQL and result sets between distributed tools and applications and mainframe data platform(s)*
- *Accesses the appropriate data using all available native file and database access aids such as indexes and keys*
- *Translates results into a consistent relational format regardless of source data type*

Tools and applications issue Java™ Database Connectivity (JDBC), Open Database Connectivity (ODBC) or call-level-interface SQL commands—SELECT, INSERT, UPDATE, DELETE and procedure CALL—to clients of InfoSphere Classic Federation Server. SQL is delivered by these clients to the InfoSphere Classic Federation Server z/OS–based data server, whose subcomponents read from and write to the legacy data sources using native database I/O commands. This process maximizes the native performance profile of these mainframe data sources, minimizes the potential for errors during processing and helps ensure the integrity and security of the underlying databases and files.

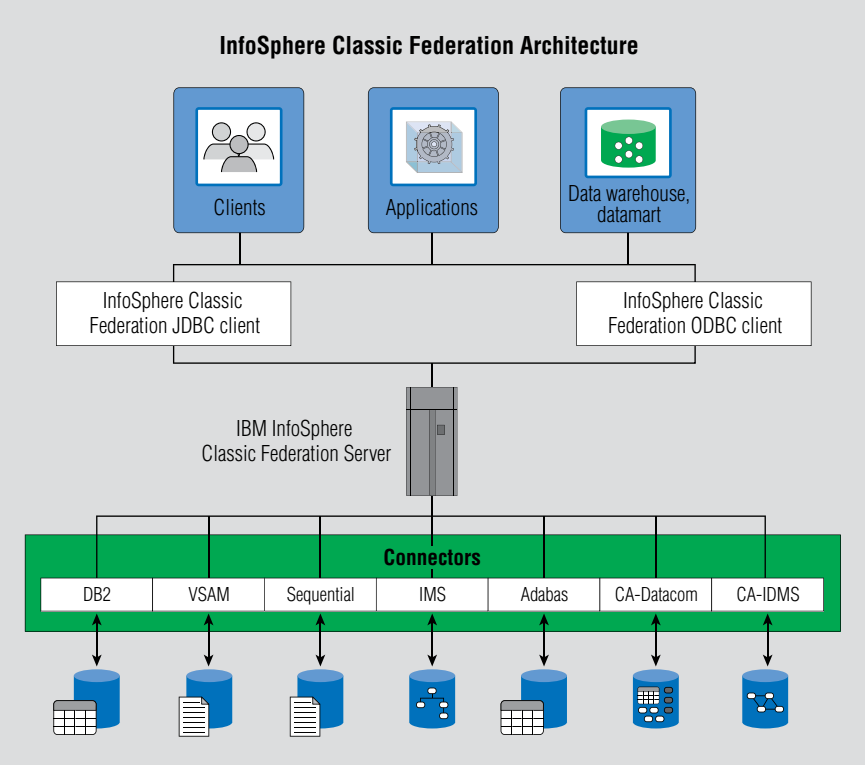

Figure 1. IBM InfoSphere Classic Federation Server for z/OS provides SQL read/write integration of mainframe data sources

Rapid integration driven by metadata

To process an SQL data access request for a pre-relational data source such as a VSAM file or an IBM IMS® database requires a mapping between the physical data layout and one or more logical relational tables.

These logical tables must also contain information on the underlying file or database structures such as the hierarchy of an IMS database, the set relationships of a CA-IDMS database or even the redefined record layouts of a VSAM file. This metadata mapping enables the operational components of InfoSphere Classic Federation Server to efficiently navigate the databases and files.

InfoSphere Classic Federation Server is a metadata-driven implementation that leverages a dynamic metadata discovery process to accelerate the implementation process. The Classic Data Architect, an Eclipse-based GUI, automates the process of mapping legacy file and database content to logical relational tables and views using the physical definitions—IMS DBDs, CA-IDMS schemas and subschemas, Software AG Adabas Predict, PL/I Includes and COBOL Copybooks — that you already have. This foundation enables InfoSphere Classic Federation Server to deliver the power of SQL for everything from a simple VSAM file to a complex IMS database.

InfoSphere Classic Federation Server has multiple uses

- *Delivers operational data to customer self-service environments. For example, using ODBC SQL, an insurance company connects its policy holders, medical providers and agents with IMS, VSAM and IBM DB2® accounting, policy and claims data through an interactive voice response (IVR) system and self-service Web sites.*
- *Connects e-commerce sites with current mainframe order-processing data. Using JDBC SQL with IBM WebSphere Application Server, a catalog retailer connects its Web sales site with the mainframe Computer Associates CA-IDMS inventory data and critical shipping algorithms that also are used by its mainframe COBOL call-center order-processing applications.*
- *Integrates business intelligence systems with enterprise data. Using ODBC SQL, a leading motor craft manufacturer cut datamart development time in half while also empowering credit analysts to evaluate dealer credit requests based on up-to-the-second operational data.*
- *Empowers InfoSphere Information Server with robust mainframe data delivery for a dynamic customer data cleansing service, a bulk extract-transform-load (ETL) of an operational data store and everything in between.*

Supported databases

InfoSphere Classic Federation Server for z/OS supports the following host databases:

- *Software AG Adabas, Version 8.1.1 and 8.1.2*
- *CA-Datacom, Version 11*
- *Advantage CA-IDMS/DB for z/OS, Versions 14.1, 15 and 16*
- *IBM DB2 Universal Database™ for z/OS, Versions 8.1 and 9.1*
- *IMS, Versions 8, 9 and 10*
- *CICS Transactional Server Versions 2.3, 3.1 and 3.2*
- *DFSMS Transactional VSAM Services is a feature of z/OS and is supported at the same levels as z/OS*

For specific information about InfoSphere Classic Federation Server, please visit **ibm.com**/software/data/integration/classic_federation_server_z/

IBM InfoSphere Information Server delivers information you can trust

InfoSphere Classic Federation Server for z/OS is a companion product to IBM InfoSphere Information Server, an innovative new software platform that helps you derive more value from the complex, heterogeneous information spread across your systems. It enables your organization to integrate disparate data and deliver trusted information whenever and wherever needed, in line and in context, to specific people, applications and processes.

Together InfoSphere Information Server and InfoSphere Classic Federation Server helps business and IT personnel collaborate to understand the meaning, structure and content of mainframe information. They also provide breakthrough productivity for cleansing, transforming and moving this information consistently and securely throughout the enterprise, so it can be accessed and used in new ways to drive innovation, help increase operational efficiency and lower risk.

ibm.com/integration/software/data

For more information

To learn more about InfoSphere Information Server or InfoSphere Classic Federation Server for z/OS, contact your IBM marketing representative or IBM Business Partner, or visit

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