Information Management software





Maximize your mainframe's return on information

Delivering information you can trust with IBM Information Server for System z

Organizations face an information challenge that begins with locating information, understanding what it means and getting the information when it's needed in the form needed. Add to that the uncertainties of whether the information can be trusted and also how to control it. The challenges only mount if businesses cannot ensure that they have access to authoritative, consistent, timely and complete information.

IBM[®] Information Server for System z[™] is a fully integrated software platform that profiles, cleanses, transforms and delivers information from mainframe and distributed data sources alike to drive greater insight for the business without added IBM z/OS[®] operational costs. It can help 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 wherever and whenever it's needed, in line and in context, to specific people, applications and processes. It helps business and IT personnel collaborate to understand the meaning, structure and content of any information across any source. With breakthrough productivity and performance for cleansing, transforming and moving this information consistently and securely throughout your enterprise, IBM Information Server for System z lets you access and use information in new ways to drive innovation, help increase operational efficiency and lower risk. And, IBM Information Server for System z uniquely balances the reliability, scalability and security of the System z platform with the low-cost processing environment of the Integrated Facility for Linux[®] specialty engine. The result is a superior price/performance profile.

IBM Information Server for System z: Achieve new levels of information integration speed and flexibility

IBM Information Server for System z brings new levels of speed and flexibility for information integration, natively on the mainframe, by providing:

- A comprehensive, unified foundation for enterprise information architectures
- Fully integrated, auditable data quality as a foundation for trusted information across the enterprise
- Metadata-driven integration to provide breakthrough productivity and flexibility for integrating and enriching information

- Broad and deep connectivity and platform support to leverage and extend existing IT investments
- Simplified scalability at lower costs to help manage current and future data requirements
- Data governance capabilities to help ensure consistent and accurate compliance with information-centric regulations and requirements
- Ability to leverage existing mainframe resources to maximize the value of your IT investments
- Scalability, security, manageability and reliability of the mainframe
- Ability to add mainframe information integration workload without added z/OS operational costs

- Flexibility to perform information integration directly on the mainframe
- Superior price/performance as it leverages the low operational costs of the Integrated Facility for Linux specialty processors

IBM Information Server for System z: A complete solution for multiple business goals

A foundational element of enterprise information architectures, IBM Information Server for System z is critical to help businesses meet the demands of strategic business initiatives, arming your enterprise with accurate and consistent business insights that allow you to react competitively in the following areas:







IBM Information Server for System z helps integrate information for access and use in new ways to drive innovation, increase operational efficiencies and lower risk

• Business intelligence-With IBM

Information Server for System z, you can harness the power of structured and unstructured corporate data to gain a 360-degree view of customers, suppliers, partners and operations; create a solid, enterprise-wide understanding of existing data sources to support better decisions; cleanse, correct and standardize information; and load analytical views for reuse throughout the enterprise.

 Master data management–Develop authoritative master data with IBM Information Server for System z by enabling your organization to understand where and how information is stored across source systems. Consolidate disparate data into a single, reliable master record, cleansing and standardizing the information; and remove duplicates and link records across systems. With options for leveraging the data based on your organization's needs and initiatives, you can load the master record into operational data stores, data warehouses or master data application management infrastructures like IBM WebSphere® Customer Center, or assemble it on demand.

- Infrastructure rationalization–IBM Information Server for System z allows you to define migration rules for consolidating instances or moving data from obsolete systems to new applications and databases, helping you reduce operating costs by understanding relationships between systems.
- Business transformation—When it comes to strategic business initiatives, IBM Information Server for System z can help your organization speed time to value by accelerating development cycles and help to increase business agility by providing reusable information services that can be seamlessly plugged into applications,

business processes and portals. These standards-based services are centrally maintained by information specialists with a single point of maintenance, but are widely accessible throughout the enterprise.

Risk and compliance–Reduce risk exposure while improving visibility and data governance with IBM Information Server for System z. Define and maintain complete, authoritative and auditable views of information with proof of lineage and quality. These views can be made widely available and reusable as shared services, while the inherent rules are maintained centrally.

Derive more value from complex, heterogeneous information spread across systems

What strategic initiatives are in process at your organization? Enabling rapid response to new products and services opportunities, not to mention competitive threats? Building an agile enterprise capable of making decisions quickly, if not on the fly? Or does it involve creating an information infrastructure that delivers the right information in the right form at the right time to the right person? Perhaps it is all of these.

IBM Information Server for System z delivers all the functions required to integrate, enrich and deliver information that you can trust for your key business initiatives. With rich functionality, broad connectivity to heterogeneous sources and a unified metadata-driven approach, it provides a



strong foundation for enterprise information architecture.

Understand your data

By helping you understand and analyze the meaning, relationships and lineage of information, IBM Information Server for System z enables discovery, definition and modeling of information content and structure. By automating data profiling and data quality auditing within systems, you can:

- Create an understanding of data sources and relationships
- Eliminate the risk of utilizing or proliferating inaccurate or inconsistent data
- Improve productivity
- Leverage existing IT investments while increasing capabilities

Cleanse your information

IBM Information Server for System z provides data cleansing capabilities that help ensure auditable data quality and consistency by standardizing, validating, matching and merging information to create comprehensive and authoritative information for multiple uses. Quality logic is designed visually and deployed universally, helping to ensure data consistency and accuracy across the enterprise. By improving the quality of information, your organization can:

- Make more efficient and effective business decisions with trustworthy data
- Reduce IT and supply chain costs with a single, accurate view of customers, products and suppliers
- Improve customer service and revenuegenerating opportunities
- Assemble the auditable, trusted information needed to comply with regulations like Sarbanes-Oxley and Basel II

Transform your data into information

IBM Information Server for System z can also transform and enrich information for new uses in new contexts. Hundreds of prebuilt, metadata-driven transformation functions combine, restructure and aggregate information from its current application-centric form into entirely new contexts, allowing information to be used in new ways to suit new business needs. Using these functions, you can:

- Remove the complexity of integrating data from heterogeneous data sources
- Derive important and relevant information out of complex, heterogeneous data
- Deliver information in a form appropriate for its intended use

• Provide an enterprise-wide view of the business at any time, to anyone

Deliver your information

With the ability to virtualize, synchronize or move information to deliver it in line to the people, processes or applications that need it, IBM Information Server for System z provides information when you need it, how you need it. Whether the information is delivered on demand, through federation or on a timed or event-driven basis, it can be moved in bulk from location to location or accessed in place reusing the same core logic. Information delivery enables you to:

- Ensure information is always available, when and where it is needed
- Improve data accessibility and consistency for improved self-service operations for customers
- Reduce latency for real-time visibility into operational information

IBM Information Server for System z leverages powerful parallel processing technology to quickly process enormous volumes of information. With this technology, processing capacity is not an inhibitor to achieving project results, allowing solutions to easily expand to new hardware and fully leveraging the processing power of all available hardware.



Building on a unified metadata foundation

IBM Information Server for System z leverages a unified metadata infrastructure to facilitate a shared understanding across business and technical domains. This metadata foundation not only reduces the time between specification and build, but also provides a persistent record of understanding that can help drastically reduce downstream project delivery times and improve overall insight and confidence in information. All functions of IBM Information Server for System z share the same meta model-spanning design and operational metadata-making it easier for different roles and functions to collaborate seamlessly to complete project tasks. It provides comprehensive reporting on data movement, data lineage, business meaning and the impact of changes and dependencies across IBM Information Server for System z modules and third-party tools.

Common connectivity

For information across diverse sources, including structured, unstructured, mainframe and application data sources, IBM Information Server for System z provides broad and deep connectivity. Metadatadriven connectivity is shared across the platform and connection objects are reusable across functions, making it easier than ever to locate any type of information across the enterprise and deliver it on demand.

Common services

Built entirely on a set of shared services that centralize core tasks across the platform, IBM Information Server for System z manages administrative tasks like security, user administration, logging and reporting. Regardless of which product function is in use, IBM Information Server for System z manages and controls them all in one location.

Common services also include metadata services for access and analysis of metadata across the platform. In addition, the common services layer manages how services are deployed from any of the product functions, enabling cleansing and transformation rules or federated queries to be published as shared services within a Service Oriented Architecture (SOA), using a consistent and easy-to-use GUI.

Unified user interface

Development teams will appreciate the unified, role-centric visual user interfaces of IBM Information Server for System z as they design information integration logic across functions. Segmented across three activity types—analysis, development and administration—the unified user interface focuses on role-centric productivity and cross-role collaboration, dramatically improving project development time.

Linux adds value to IBM Information Server for System z architecture

Linux provides well-known attributes rich security features, stability, flexibility, interoperability, portability of code and skills and reduced software costs—and derives unique benefits when running on mainframe hardware with its distinctive



The IBM Information Server for System z high-level architecture includes architectural elements and a unified parallel processing engine

qualities of service and virtualization capabilities that distinguish System z technology from other architectures. The pairing of IBM Information Server with this robust operational platform creates an especially powerful integration solution.

Advanced virtualization, intelligent workload management, the unique ability to support diverse workloads concurrently, high levels of security and intelligent recovery capabilities are just a few strengths that make the System z platform an ideal choice to host mission-critical applications and to serve as a hub for the IT infrastructure. Add the historical mainframe strengths-reliability, availability, scalability and security-and the result is a system designed to deliver high levels of resource utilization and advanced asset protection. System z platforms help simplify the IT infrastructure by consolidating workloads, protecting data and maintaining privacy, minimizing downtime and reducing data loss.

Linux virtual servers on System z can help unify your IT infrastructure, leveraging the comprehensive virtualization technology and intelligent workload management. You can grow virtually with IBM z/VM[®] virtualization capabilities, consolidating from tens to hundreds of independent servers onto a single System z platform. The deployment of more and more distributed servers often results in a level of complexity that is unmanageable and increasingly expensive. Virtual Linux servers may help to unify your IT infrastructure by consolidating that environment onto a single centralized server, potentially providing better resource utilization, easier maintenance and more effective and efficient operations.

Delivering business results with integrated information based on innovative technology

Most key business initiatives cannot succeed without effective information integration. That is why information integration solutions from IBM go beyond software to provide the services and industry-aligned expertise to meet your unique business goals. With professional services and support, your enterprise can rely on customized implementations to meet specific objectives—and leverage proven industry data, process and integration models to speed the time to value for critical business initiatives. The complete solution includes:

- Assistance with the application of proven data integration methodology to avoid missing critical steps early in the process
- Training, best practices and mentoring to get your team up to speed quickly while they gain experience that is critical to long-term system maintenance
- Utilization of some of the broadest and most comprehensive data, process and integration models for banking, insurance, telecommunications and retail

Global Technology Services

IBM brings years of experience to data system design and validating client information management architectures to map a solution to client-specific business requirements. IBM Information Management Services helps clients configure an integrated IT architecture that incorporates leading technologies and maximizes both current and subsequent investments in information management by integrating data to support business initiatives and improve the productivity of employees, customers and partners, as well as raise confidence levels in data validity and integrity.

Technology for innovation

Working hand-in-hand with the patented IBM Iterations[®] data integration methodology, IBM Information Server for System z helps you integrate information and deliver fast, highquality results for key business initiatives.

IBM Information Server for System z achieves new levels of information integration, speed and flexibility by providing data quality and transformation functions to help improve productivity; data profiling and analysis to boost trust in information; automated partitioning and process pipelining for scalability; and rapid service deployment to enhance value (for more on the platform, see sidebar, page 8).



Benefits for your business

For a strategic deployment across the enterprise or a tactical implementation for a specific project, you can lay the groundwork for long-term benefits by basing your information integration architecture on IBM Information Server for System z. Designed for reuse, extensibility across the enterprise and adaptability to evolving integration requirements, IBM Information Server for System z helps you achieve important business objectives and benefits, including:

- Accelerated time to value for strategic business initiatives through shared services and integrated metadata with breakthrough productivity and flexibility for integrating and enriching information
- Risk reduction as the quality of auditable business data improves with a foundation for trusted information across the enterprise
- Decreased costs as data redundancy is reduced and systems are streamlined with consistent, reusable information services
- Rapid response to regulatory compliance measures imposed by an industry or government

Additionally, IBM System z advanced hardware, operating system and data serving environment provides a flexible and dynamic platform that can adjust to changing business needs, particularly the high availability and security requirements for central data servers. Industry-leading capabilities

IBM Information Server for System z product modules and companion products

Additional IBM Information Server for System z solution options include the following proven technologies:

- IBM WebSphere Information Analyzer for Linux on System z profiles and establishes an understanding of source systems, and monitors data rules on an ongoing basis to eliminate the risk of proliferating incorrect and inaccurate data.
- IBM WebSphere QualityStage[™] for Linux on System z standardizes and matches information across heterogeneous sources.
- IBM WebSphere DataStage® for Linux on System z extracts, transforms and loads data between multiple sources and targets.
- IBM WebSphere Federation Server defines integrated views across diverse and distributed information sources, including cost-based query optimization and integrated caching.
- IBM WebSphere Information Services Director for Linux on System z enables information access and integration processes for publishing as reusable services in an SOA.

 IBM WebSphere Metadata Server for Linux on System z provides unified management, analysis and interchange of metadata through a shared repository and services infrastructure.

- IBM WebSphere Business Glossary for Linux on System z defines data stewards, and creates and manages business terms and definitions and relates these to physical data assets.
- IBM Metadata Workbench for Linux on System z provides comprehensive reporting on data movement, data lineage, business meaning and impact of changes and dependencies across IBM Information Server for System z modules and third-party tools.
- IBM Rational[®] Data Architect provides enterprise data modeling and information integration design capabilities.
- IBM WebSphere Replication Server provides high-speed, event-based replication between databases for high availability, disaster recovery, data synchronization and data distribution.
- IBM WebSphere Data Event Publisher detects and responds to data changes in source systems, publishing changes to subscribed systems, or feeding changed data into other modules for event-based processing.

are key to providing a security-rich platform that delivers high levels of protection for your data—from cryptographic coprocessors to encryption capabilities for data flowing from the system into the network, as well as data stored on tapes.

Optimized for your success—and system requirements

When you are tasked with doing more for the business with less staff and smaller budgets, it is critical to leverage the systems and applications you already have in place.



IBM Information Server for System z platform

Built on a unified platform and working in concert with revolutionary data integration methodology, IBM Information Server for System z helps organizations derive more value from complex, heterogeneous information spread across their systems and delivers:

- Productivity: Dramatically simplifies how organizations deal with heterogeneous information, creating information that is quickly and easily understood and integrated and delivered to meet any business requirement
- Trust: Increases confidence in information by helping to ensure consistency and quality in information across the enterprise; facilitates alignment of business and IT goals by maintaining meaning, context and lineage of information
- Scalability and performance: Enables enterprises to deal with the huge and ongoing growth of data volume, providing a complete view of information in a timely and efficient manner
- Value: Leverages Service Oriented Architecture (SOA) to unlock information from individual application silos, creating more accessible and consistent information throughout the enterprise

IBM Information Server for System z is the one solution, from a single vendor, that supports integration of all data types and multiple architectures. With this solid base, your organization can expedite transactions, streamline operations, support customers and make sound decisions. With IBM Information Server for System z, you can support multiple operating systems, including the widest available range of hardware and operating system environments, such as Microsoft[®] Windows[®], HP-UX (PA-RISC and Intel® Itanium®), Linux, Solaris and IBM z/OS for mainframes.

Connectors bring all your information together:

- Structured-High-speed, bulk and eventdriven native connectors for all types of databases, including relational, nonrelational and XML, as well as other file systems and hierarchical data sources
- Unstructured-Content-optimized connectors for unstructured data sources, including content repositories, file systems, e-mail systems and workflow engines
- Application-High-speed and bulk metadata-driven connectors for packaged applications, including SAP, PeopleSoft, Siebel, JDA and others
- Mainframe-Native high-speed, bulk, and • event-driven connectivity for all mainframe data sources

For more information

To learn more about IBM Information Server for System z or information integration solutions from IBM, contact your IBM marketing representative or IBM Business Partner, or visit ibm.com/software/data/ integration/info_server_system_z

To find additional literature about Information Products and Solutions technologies, visit ibm.com/software/ data/integration/library.html



© Copyright IBM Corporation 2007

IBM Software Group Route 100 Somers, NY 10589

Produced in the United States of America September 2007 All Rights Reserved

IBM, the IBM logo, DataStage, Iterations, QualityStage, Rational, System z, WebSphere, z/OS and z/VM are trademarks of International Business Machines Corporation in the United States, other countries or both.

Intel and Itanium are trademarks or registered trademarks of Intel Corporation in the United States, other countries or both.

Linux is a registered trademark of Linus Torvalds in the United States, other countries or both.

Microsoft and Windows are trademarks or registered trademarks of Microsoft Corporation in the United States, other countries or both.

Other company, product or service names may be the trademarks or service marks of others.

References in this publication to IBM products and services do not imply that IBM intends to make them available in all countries in which IBM operates. All statements regarding IBM's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only.

TAKE BACK CONTROL WITH Information Management



IMB12038-USEN-00