

IBM Information Server, Version 8.0: Managing information as a service

Highlights

- ***Provide breakthrough productivity and flexibility with metadata-driven integration***
- ***Build a foundation for trusted information across the enterprise with auditable data quality***
- ***Provide consistent, reusable information services, defined and managed by those who know the information best***
- ***Accelerate time to value with proven, industry-aligned solutions and expertise***
- ***Develop a unified view of your business for better decision making***

Services oriented architecture and information integration: The need for reuse

IBM® Information Server leverages a Services Oriented Architecture (SOA) to unlock information from individual application silos, allowing this data to be more accessible and consistent throughout the company. It provides a unified mechanism for publishing and managing services across data quality, data transformation and federation functions, allowing information specialists to easily deploy services for any information integration task and consistently manage them.

By providing information as a service, businesses can improve the availability and consistency of information and remove the traditional barriers to information sharing. To help ensure consistent definitions, packaging and governance of the data,

IBM Information Server delivers information services that can be reused easily across processes and maintained independently to make the business more flexible and improve the productivity of IT resources. Once in place, this information integration infrastructure provides great downstream leverage, allowing IT departments to address new challenges with more flexibility and to gain better control over information quality and accessibility.

Shared services centralize data governance

IBM Information Server is built entirely on a set of shared services that centralize core tasks across the platform. It allows administrative tasks like security, user administration, logging and reporting to be managed and controlled in one place, regardless of which product function is being used.

The common services also include metadata services, which provide standard service-oriented access and analysis of metadata across the platform. In addition, the common services layer manages how information services are deployed from any of the product functions, allowing cleansing and transformation rules or federated queries to be published as shared services within an SOA, using a consistent and easy-to-use mechanism.

IBM Information Server provides these capabilities with its new product module, IBM WebSphere® Information Services Director. This module allows developers to take data integration logic built using IBM Information Server and publish it as an “always on” service—in minutes. Deployed directly into a Java™ 2 Platform Enterprise Edition (J2EE™) environment, these services support a choice of open standard interfaces and maintain standards-based security, high availability, reliability and load balancing. This functionality makes WebSphere Information Services Director manageable alongside other services—not just Web services wrappers—on other

Harness the power of service-oriented data integration

Benefits and capabilities

- *Service orient your data warehouse to support time-sensitive analytics by quickly turning extract, transform, load (ETL) jobs into message-based data warehouse updates.*
- *Improve accuracy and completeness of all data by creating shared services for data cleansing that can be called in-flight and on demand from any application, business process or portal.*
- *Help ensure consistent enforcement of governance across all uses of data by creating shared data access objects for transactional, operational and analytical data.*
- *Utilize the best data available in the enterprise for operational decision making with real-time matching services that can be used to provide probabilistic record linkage against master data stores and systems of record.*
- *Provide enterprise-wide visibility to key business information with standard validation services of any data, whether structured, unstructured, application or mainframe.*
- *Obtain a complete view of customer information in real time with federation services that can be tied directly into any application or self-service portal.*

proprietary external technologies. With a scalable, fault-tolerant architecture capable of parallel processing and the ability to start new processes to pick up load spikes and shut them down again when volumes decline, IBM Information Server provides the infrastructure required to address enterprise SOA requirements.

WebSphere Information Services Director architecture

WebSphere Information Services Director is built on a pure J2EE architecture. It provides a secure and resilient framework for hosting data integration services and dispatching requests to IBM Information Server or other applications and databases.

Key features of WebSphere Information Services Director

- **Rapid deployment**—Services can be deployed for data integration logic in minutes, using intuitive wizards that do not presume advanced J2EE knowledge.
- **Service abstraction**—Services defined using IBM Information Server are true business objects that are deployed natively in the application server, completely hiding the implementation complexity from the service consumer. This allows developers to use these services without knowing anything about WebSphere Information Services Director or other product modules.
- **Binding flexibility**—Services can be deployed with a choice of bindings, including Web services or EJB, providing for all types of requirements and improving the opportunities for reuse.
- **High availability**—IBM Information Server provides a resilient environment that supports fault tolerance and high availability.
- **High performance**—IBM Information Server combines the concepts of load balancing with true parallel execution, resulting in the fastest possible execution of data integration tasks.
- **Metadata-driven services**—WebSphere Information Services Director uses the metadata of the underlying data integration logic to determine what the request and response data of the service will look like.
- **Standards support**—IBM Information Server was built to provide an SOA for data integration that leverages and reinforces the open standards activities of organizations like WS-I, the Organization for the Advancement of Structured Information Standards (OASIS), the World Wide Web Consortium (W3C) and the Java Community Process.

By packaging information integration logic as services, it effectively insulates developers from the complexity of underlying data sources. Developers can focus on development efforts while information specialists focus on all integration efforts.

WebSphere Information Services Director maintains a directory of available services that is directly linked into the metadata infrastructure underlying the IBM Information Server. This

structure enables centralized management of data integration services.

Flexibility to maximize reuse

IBM Information Server enables organizations to maximize reuse by supporting many different project requirements and ways of interoperating with the services. It provides the ability to publish services with a few simple clicks—in minutes and without coding. The same service supports multiple protocol bindings,

such as SOAP/HTTP (Web services for ubiquitous support) and Enterprise JavaBeans™ (EJB™) for high-speed direct Java integration. It supports structured data types and arrays of structured data types so that multiple rows of data can be passed through a single service call. These features improve the utility of services and therefore increase the likelihood of reuse and adoption across the enterprise.



IBM Information Server delivers information you can trust

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 challenges continue to grow if businesses cannot ensure that they have access to authoritative, consistent, timely and complete information. As organizations look toward SOA to increase flexibility and responsiveness, industry analysts assert that companies will waste their investment in SOA unless they have enterprise information they can leverage.

IBM Information Server is a revolutionary new software platform that helps organizations derive more value from the complex, heterogeneous information spread across their systems. It enables organizations to integrate

disparate data and deliver trusted information wherever and whenever needed, in line and in context, to specific people, applications and processes. It helps business and IT personnel to collaborate to understand the meaning, structure and content of any type of information across any sources. It provides breakthrough productivity and performance 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.

For more information

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

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