

IBM Information Server Blade

Highlights

- ***Gain new insights from an integrated view of enterprise information***
- ***Improve time to value and help lower costs with the preconfigured solution***
- ***Simplify deployment with pre-installed software***
- ***Build in responsiveness with highly scalable information grid architecture***
- ***Help optimize return on investment (ROI) with IBM-optimized software and hardware***
- ***Help lower energy costs with IBM BladeCenter***

One of the most significant opportunities for IT today is to provide business executives with a single, consistent view of all their critical enterprise data. Until now, this goal has been difficult to reach. Many silos of information exist throughout most global enterprises, making it difficult for executives to get a macro view of their operations or to correlate information from across the enterprise. They need the ability to integrate information from across the enterprise, ensure the quality of the information and deliver it on demand.

IBM Information Server provides a single view of information

IBM® Information Server is a revolutionary new software platform that addresses these challenges by helping organizations produce better results, faster. By presenting a single view of enterprise information, IBM Information Server helps users quickly gain new insights from the complex, heterogeneous information spread across their enterprise. IBM Information Server also helps maintain up-to-date views of that trusted information over time—delivering information on demand to people, applications and business processes.

IBM Information Server Blade incorporates grid technology

The IBM Information Server Blade platform, a cost-effective, scalable deployment option for IBM Information Server software, is composed of integrated hardware and software along with optional IBM implementation services. The platform is based on an information grid architecture: IBM Information Server software executes on a shared-nothing, massively parallel computing system. As shown in Figure 1, IBM BladeCenter® compute nodes and the storage system are interconnected by a high-speed network within the BladeCenter chassis.

Compared to conventional symmetric multiprocessing (SMP) servers, a grid of blade servers is much more cost-effective. As a result, many experts believe that information grid architecture will become the new standard for enterprise computing.

IBM Information Server Blade provides a complete solution

IBM Information Server Blade is composed of up to 12 compute nodes plus an IBM WebSphere® DataStage® conductor node and a node for IBM Metadata Server. The following software is preloaded on the IBM Information Server Blade platform:

- **WebSphere DataStage/IBM WebSphere QualityStage:** These pre-installed modules of the IBM Information Server suite perform data quality analysis (WebSphere QualityStage®) and the extract, transform and load (ETL) function for new cleansed data (WebSphere DataStage).
- **IBM Metadata Server:** IBM Metadata Server is standard in the IBM Information Server Blade offering; the other WebSphere modules are optional. IBM WebSphere Application Server and IBM DB2® database support IBM Metadata Server and provide the underlying infrastructure for IBM Information Server. DB2 stores metadata captured by WebSphere QualityStage and WebSphere DataStage.
- **IBM Tivoli® Workload Scheduler LoadLeveler®:** Tivoli software serves as the job scheduling system, providing a single point of control for workload management in a grid environment, allowing administrators to manage all servers as if they were a single server.

IBM Information Server Blade also includes several types of nodes:

- **Management server** controls the dynamic installation of IBM

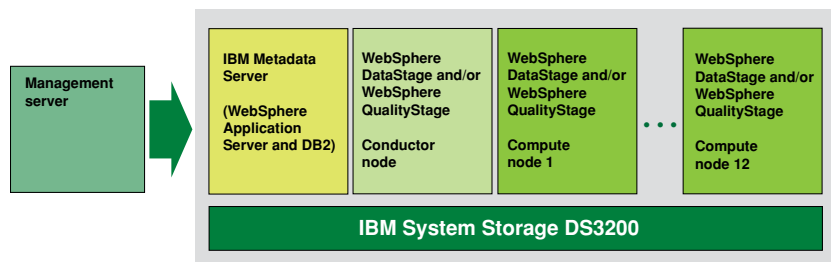


Figure 1. IBM Information Server Blade platform

Information Server Blade software on the nodes of the grid.

- **Metadata node** contains the IBM Metadata Server.
- **WebSphere DataStage/WebSphere QualityStage conductor node** controls dynamic configuration and job deployment on the compute nodes.
- **From a total of 14 compute nodes, 12 are available to run WebSphere QualityStage or WebSphere DataStage jobs.**

The IBM Information Server Blade platform is more than just a packaged “appliance” that bundles hardware and software. Customers can extend the value of their investment by installing additional IBM Information Server modules, such as IBM WebSphere Information Analyzer, IBM WebSphere Federation Server or a data warehouse.

IBM BladeCenter and IBM Systems Storage help lower total cost of ownership

IBM Information Server Blade is based on IBM BladeCenter servers. A single IBM BladeCenter chassis houses all servers, storage and networking equipment; this small, self-contained package reduces complexity and helps the IBM Information Server Blade

platform fit into existing data centers. Blade servers share power supplies and other devices, such as internal switches and bridges, that help cut energy consumption as much as 30 to 40 percent compared to rack servers. There are no single points of failure within the IBM BladeCenter chassis: Dual I/O and power connections to the chassis minimize the potential for outages. IBM BladeCenter is currently the only blade product with redundant connections from the wall outlet to the blade server.

IBM System Storage™ DS3200 is a 2U storage system with high availability features including dual ports, dual power supplies and hot-swappable disks. Internally scalable up to 3.6TB of storage, DS3200 can be expanded further by adding disk enclosures.

Pre-installed software reduces deployment costs and time to value

IBM Information Server Blade is prepackaged and tested in the factory, eliminating installation and configuration time and making it nearly plug-and-play to help dramatically reduce the time required to obtain results.

Scalable platform can respond quickly to growing information needs

IBM Information Server Blade can not only handle large volumes of data, but it also offers unlimited scalability. With its grid architecture, adding processing capacity is as simple as adding compute nodes.

IBM building blocks help deliver attractive ROI

The IBM Information Server Blade platform is based on the IBM BladeCenter HS21 server, which has a proven ability to cost-effectively process information integration workloads. In addition, BladeCenter management tools dramatically streamline server management, helping to reduce time to deploy servers and increasing IT responsiveness. With the BladeCenter Advanced Management Module and IBM Director software, IT administrators

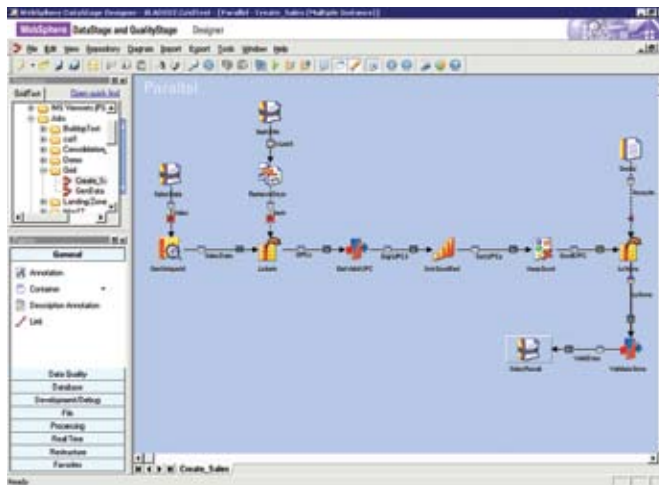


Figure 2. An example of a WebSphere DataStage job flow

can interact with BladeCenter hardware, even if the server is powered down or otherwise non-responsive.

With Tivoli Workload Scheduler LoadLeveler software, administrators can manage how IBM Information Server is dispatched across nodes in the grid. Figure 2 shows an example of a WebSphere DataStage job flow.

IBM Services brings experience and best practices

IBM Services help customers integrate the IBM Information Server Blade platform into their environment. This knowledge and expertise can help organizations streamline deployments and reduce the time to prepare for production operations.

Specifications: IBM Information Server Blade	
Server	• IBM BladeCenter HS21
CPU	• Two dual-core Intel® Xeon™ processors
Memory	• 4GB to 8GB
Compute nodes	• 3 to 12 blades (includes a management node, an IBM Metadata Server and an IBM WebSphere DataStage conductor node)
Storage	• IBM System Storage DS3200 (456GB to 912GB)
Operating system	• Red Hat Enterprise Linux® 4
IBM Information Server components	• WebSphere QualityStage, WebSphere DataStage, parallel engine infrastructure, IBM Metadata Server
Grid resource manager	• Tivoli Workload Scheduler LoadLeveler
Services (optional)	• IBM can assist with integration of the IBM Information Server Blade platform into an existing infrastructure



For more information

To explore how IBM can help your organization obtain a single view of your critical data, contact your IBM marketing representative or IBM Business Partner, or visit:

IBM Information Server Blade:

ibm.com/software/data/integration/info_server/blade

IBM Information Integration:

ibm.com/software/data/ips

IBM Grid Computing:

ibm.com/grid

IBM BladeCenter:

ibm.com/systems/bladecenter

© 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, BladeCenter, DataStage, DB2, LoadLeveler, QualityStage, Systems Storage, Tivoli and WebSphere are trademarks or registered trademarks of International Business Machines 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.

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

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

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

TAKE BACK CONTROL WITH **Information Management**