IBM Information Management software

# IBM Data Warehousing Balanced Configuration Unit for Linux

## Highlights

- ***Simplifies data warehouse planning and integration***
- ***Provides a modular building block for easy scaling***
- ***Delivers near-real-time business intelligence and insights***
- ***Enables enterprise-wide access to information***
- ***Based on open and industry standards***

**Business intelligence enables informed decision making throughout the enterprise**

Greater use of business intelligence (BI) is a top priority for today's enterprises. Access to information and analytics can provide valuable insights into how to gain a competitive advantage in the marketplace.

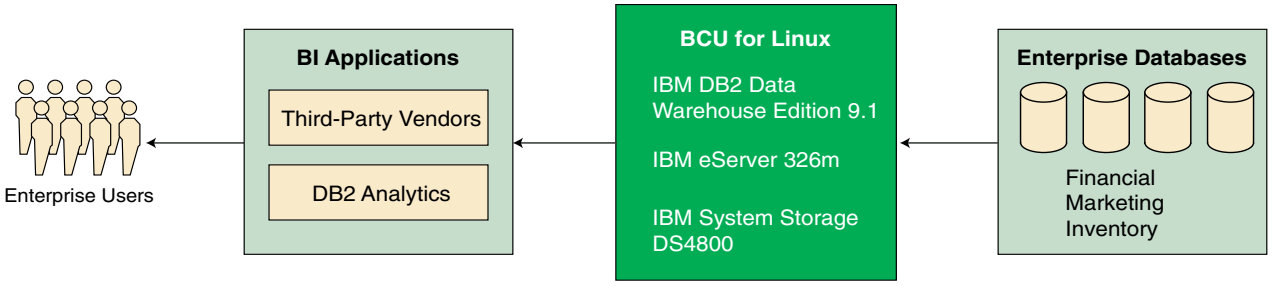
BI systems require a combination of robust components, including databases, analytical and warehousing software, servers and storage. IBM can help enterprises design and implement a BI system using the IBM® Data Warehousing Balanced Configuration Unit (BCU) for Linux. Previously available for users of the IBM AIX 5L™ operating system, IBM has now extended the BCU to the Linux® platform for enterprises building or growing their data warehouses using the Linux operating system.

The BCU solution provides enterprises the ability to analyze, understand and act on large amounts of information—on demand—and also provides unparalleled support for archiving, integrating and analyzing vast amounts of historical data.

A BCU consists of hardware and software that IBM has integrated, preconfigured, tested and validated as a scalable solution for data warehousing systems. The BCU was designed around the concept of a balanced infrastructure through the use of modular nodes or "building blocks". A single BCU node contains a balanced amount of disk space, processing power and memory to help optimize both cost-effectiveness and throughput. Using this approach, IT departments can reduce design time, shorten deployments and maintain a favorable price/performance ratio as they add building block nodes to enlarge their data warehouses over time.

**IBM BCU helps enterprises control costs**

Business intelligence applications are compute-intensive, with high performance often a critical factor in meeting client needs. But performance should come at a reasonable cost. The BCU is based on the concept of balancing the components in a data warehouse in order to minimize the costly performance bottlenecks commonly found in data warehouses. The BCU allows




*One or several BCU for Linux nodes can function as a data warehouse, integrating data from single-subject databases and delivering it to thousands of users via BI applications*

an IT organization to use its hardware more effectively, rather than purchasing resources that are not needed.

**IBM BCU helps enterprises manage growth**

The BCU makes scaling a data warehouse simple because of the building block nature of the design. As business requirements change, workload demands evolve and the quantity of data expands, BCUs can be added easily to grow the warehouse. An IT organization also can scale the solution to consolidate data from many existing datamarts into an enterprise-spanning data warehouse, which provides a unified view of enterprise activities. The simplicity of scaling a BCU allows an organization to store multiple terabytes of information while maintaining near-real-time performance levels and a strong price/performance ratio.

**IBM BCU is easy to deploy and administer**

A BCU can reduce the total time to deliver a data warehouse solution because it minimizes the complexity of warehouse design and implementation. The BCU components are carefully pre-selected to reduce design cycles and speed installation. The BCU for Linux includes cluster management software, which helps to simplify routine administrative tasks, and professional services that facilitate implementation.

**IBM BCU minimizes downtime**

Designed for robust availability, the BCU features include hardware component redundancy and a fault-tolerant design. In situations where the highest possible level of availability is required, the BCU for Linux has an optional high availability configuration that provides the ability to recover easily from hardware failures. This helps minimize downtime in the unlikely event of a failure.

**IBM BCU is tested and validated by numerous customers**

The BCU is based on IBM's experience as a leader in the worldwide data warehousing market. Its design, based on best practices, has undergone extensive quality and performance testing in our labs and has been validated in the field by numerous data warehouse customers.

**The BCU for Linux uses best-of-breed components**

A single BCU for Linux node consists of data warehouse and business intelligence software, a server running Linux and a storage server. The specific components of the BCU for Linux v2.1 include:

- ***IBM DB2® Data Warehouse Edition 9.1:*** *The Data Warehouse Edition is designed to help organizations reduce cost and complexity while also overcoming barriers to business growth.*

*It combines essential components needed for near-real-time data warehouse administration, data mining, Online Analytical Processing (OLAP) and inline analytics and reporting. Service-oriented architecture (SOA) applications, for example, can use the data mining capabilities to uncover valuable insight into business information without users needing extensive data mining expertise.*

*IBM DB2 Universal Database™, supported by analytics design and development tools, serves as the foundation for DB2 Data Warehouse Edition.*

*DB2 Alphablox® leverages the information warehouse through its powerful programming model and development tools for custom analytic applications.*

*The data mining algorithms analyze warehouse data within the secure and managed confines of the warehouse, providing more accurate and detailed data for forecasts and deeper insights into customer behavior for more efficient targeted marketing and product planning.*

*The Eclipse-based Design Studio helps users to profile data, sample and view table contents, and visualize correlated statistics to determine the best potential parts of the warehouse for mining.*

- ***IBM eServer™ 326m:*** *Up to two dual-core AMD Opteron™ processors deliver blazing performance with high memory bandwidth in a 1U form factor. The e326m handles both 32- and 64-bit applications with low energy consumption and reduced thermal output, which helps to provide end users with lower total cost of ownership (TCO).*

- ***IBM System Storage™ DS4800:*** *An enterprise-class storage server, the DS4800 is the most powerful and scalable member of the IBM System Storage DS4000 product family. The DS4800 offers both 2 Gbps and 4 Gbps Fibre Channel interfaces, making it an excellent choice for performance-oriented and data-intensive environments. Its modular design scales to more than 67TB of Fibre Channel or 89TB of Serial ATA physical disk storage capacity. Data protection features include multiple RAID levels, storage partitioning (LUN masking), two levels of remote support and optional FlashCopy®, Volume Copy and Enhanced Remote Mirroring features. The hardware architecture is designed with dual RAID controllers and redundant, hot-swappable components for added availability in critical BI environments. Powerful storage management is provided at no additional cost via the DS4000 Storage Manager.*

## IBM BCU for Linux helps reduce cost and risk of implementing a data warehouse

IBM is a leading provider of data warehousing systems for business intelligence. IBM has defined, tested and validated an exceptional high-performance data warehousing system that provides a balanced configuration for excellent throughput and scalability. The IBM BCU helps to cost-effectively deliver near-real-time business insights to decision makers throughout the enterprise—now and in the future.

For more information, visit our Web site at **ibm.com**/bi



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