Informatica PowerCenter Enterprise Grid Option
Delivering Cost-Effective Scalability for Enterprise Data Integration

Kevin McDearis
CIO, Software Division
CheckFree Corporation

“We are impressed with how PowerCenter successfully addresses many of the most pressing issues of high-volume data environments. The grid and high-availability features support the kind of scalable performance and nonstop operations that are requisite to our customers’ business-critical, ‘always-on’ environments.”

Commodity hardware, such as blade servers, has shown a great deal of promise in scalable processing to dramatically lower costs. But these grid environments are dynamic; nodes are constantly added to and removed from the grid. In addition, parallelization schemes require constant tuning to optimize performance.

The PowerCenter® Enterprise Grid Option delivers cost-effective scalability by exploiting grid computing architectures for enterprise data integration. This option minimizes the amount and frequency of data mapping modifications necessary to respond to changing conditions.

The Enterprise Grid Option allows parallelization of a single session across a grid and offers high availability of the entire data integration platform, increasing both scalability and reliability.
Enterprise Grid Option
Key Features

Workflow and Session on Grid
- Distributes processing of a single session across multiple server nodes on a grid
- Helps to cost-effectively scale data integration initiatives using low-cost commodity hardware, such as blade servers
- Provides for unlimited scalability of the PowerCenter platform by allowing incremental investments in processing capacity

Adaptive Load Balancing
- Ensures smooth operations and reliable scaleout when facing spikes in data volumes or unexpected utilization loads on the grid
- Selects the best node for session execution based on resource requirements and availability
- Factors in cost-based metrics such as CPU utilization, process size, and memory requirements

High Availability
- Ensures uptime through self-monitoring of PowerCenter services for seamless failover and recovery

Dynamic Partitioning
- Automatically adjusts the parallel execution plan in response to additions/removals of nodes from the grid, with no changes to logic required
- Exponentially improves PowerCenter performance by automatically adapting to exploit available grid resources

Web-Based Administration Console
- Provides secure, centralized control over the provisioning of server nodes, PowerCenter resources, and PowerCenter services both into and out of the enterprise data integration grid
- Reduces administration costs by simplifying management of resources distributed across a grid network

Full Integration Across Entire Data Integration Platform
- Automatically applies all high availability features to all data integration processing available on the PowerCenter platform
- Enables use of heterogeneous hardware operating systems across the grid
- Interoperates with enterprise grid resource software

Increase System Reliability and IT Productivity
With PowerCenter’s unique architecture, the mapping specification is abstracted from the parallel execution plan, paving the way for the Enterprise Grid Option to offer dynamic partitioning and load balancing. Dynamic partitioning automatically adjusts the parallel execution plan in response to additions or removals of nodes from the grid or to changes in RDBMS table partitioning schemes. The partitioning capability boosts productivity by freeing developers and administrators from having to constantly refactor the parallelization scheme.

Enhance IT’s Agility and Responsiveness to Changing Business Demands
IT organizations often need to address sudden and dramatic increases in data volumes. To increase efficiency, they must also allow multiple applications to share computing resources. The Enterprise Grid Option enables IT organizations to cost-effectively scale out their computing capacity as business needs grow.

Enterprise Grid Option Benefits

Cost-Effectively Scale to Meet Business Demand
The Enterprise Grid Option provides unparalleled support for grid computing environments. In turn, IT organizations can cost-effectively scale to adjust and optimize data delivery to the enterprise. This option allows for the distribution and execution of work across heterogeneous computing resources to make the best use of existing hardware assets or new cost-effective hardware options.

Learn More
Let Informatica help you determine how the PowerCenter Enterprise Grid Option can maximize the business value of your data.

Visit us at www.informatica.com/powercenter or call 1.800.653.3871.