

IBM Software Demos

IBM SOA ObjectGrid

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Chapter 1 - Intro

Are you spending precious time or money tuning and rebuilding mission-critical, data-dependent business applications, every time volumes jump? If you need consistent, lightning-fast response times, or better than "five-nines" capability, then put ObjectGrid to the test.

ObjectGrid -- part of IBM WebSphere Extended Deployment Data Grid -- can help you overcome data bottlenecks and process even terabytes of data in record time. That's right; I said "tera", with a "T".

You'll soon see how ObjectGrid can help boost application performance in practically any industry. But for the moment, let's look at an example from the Financial Services industry.

Chapter 2

Financial exchanges have stringent IT requirements. They must be able to process tens of thousands of orders per second, be available at all times, and scale easily to handle unpredictable volume spikes and unrelenting growth of up to 50% per year or more. That's quite a challenge!

For an exchange to match orders correctly and efficiently, a coherent picture of all outstanding orders must be maintained, with 100% data integrity. Traditional high volume, high-availability application approaches typically incorporate custom or one-off technology, and almost invariably become data-constrained.

Now, consider this alternative, powered by ObjectGrid. The collection of all orders can be distributed and cached within processor memory -- across a scalable grid of servers acting as one logical super-server. And the universe of tradable stocks or other instruments can be partitioned according to user-defined rules.

Incoming orders are automatically routed to, and processed by, the responsible partition. The partitioning dramatically reduces latency, while the write-through cache eliminates most physical I/O. Large volumes of orders can be filled quickly, in a massively parallel fashion, with significantly reduced contention for database access.

The benefits of this solution, versus traditional approaches, can be game-changing:

- Parallel processing and faster data access can provide more consistent execution and increase processing performance by more than 10 times.
- Efficient caching can lower database loads by 90% or more.
- Data can be rebalanced automatically across the grid of servers

- Replication and fault tolerance can be managed automatically by the system.
- And the application can be scaled almost linearly, by simply adding new servers.

Chapter 3

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Visit: <http://demos.dfw.ibm.com> for more demonstrations

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ObjectGrid provides the flexibility to structure data architectures and processing in different ways to match different application requirements. For example:

- a simple cache configuration for merely offloading back-end database processing
- ultra scale data grids where applications can execute agents against all grid nodes in parallel and then further aggregate results in parallel
- and real time data mining, where grid nodes subscribe to events, apply them to partitioned data, and run continuous queries on each partition to produce aggregate data in real time

In fact, ObjectGrid can support thousands of servers, hosting terabytes of data, in a fully replicated, globally-distributed grid. And ObjectGrid applies advanced technology for placement -- ensuring that data is distributed correctly and allowing the grid to virtually manage itself. After all, what good is grid technology if you can't manage it?

ObjectGrid provides the power and flexibility to address application data-dependency challenges for companies in almost every industry, whether they are Banks, Insurers, Logistics firms, Travel Companies, Telecomms, Search Engine providers,... you name it.

Chapter 4 - Outro

Don't let information access speeds throttle your company's performance. If you're seeking ways to accelerate data-dependent application performance, with world-class reliability, scalability and flexibility, then you owe it to your business to evaluate ObjectGrid -- part of WebSphere Extended Deployment DataGrid -- from IBM.

You can keep tuning...and tuning...and tuning. Or, you can use ObjectGrid. The choice is yours.

So what are you waiting for? You've seen the video.

Now click the link to learn more.