



Smarten

Advanced Data Discovery

Powered by ElegantJ BI

Managed Memory Computing Concept

Business Intelligence & Advanced Data Discovery

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Disclaimer

This document is intended to support administrators, technology managers or developers using and implementing Smarten. The business needs of each organization will vary and this document is expected to provide guidelines and not rules for making any decisions related to Smarten. The overall performance of Smarten depends on many factors, including but not limited to hardware configuration and network throughput.

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1 Introduction

Smarten introduces a unique concept in Managed Memory Computing which can deliver the best response time and highest performance by effectively utilizing hybrid technology based on infrastructure and usage.

Traditional Business Intelligence solutions either use in-memory processing or cube driven architecture which is dependent on disk I/O. The effectiveness of Managed Memory Computing lies in utilizing the power of both approaches based on business needs and available infrastructure.

In keeping with the tradition of making Business Intelligence solutions simple, Smarten provides the opportunity to use both the architectures at the same time. This is the first Managed Memory Computing BI solution and it is set to transform the Business Intelligence space. Managed Memory Computing encompasses many more functional needs and will expand the scope of what Business Intelligence can deliver.

Note:

Throughout this document, Smarten Advanced Data Discovery is abbreviated as Smarten.

2 The Concept of Managed Memory Computing

Aggregated data cubes and datasets are the most effective form of storage of aggregated or summarized data for quick analysis. Utilizing these data cubes or datasets involves intense disk I/O operations.

Conventional, in-memory processing does not rely on stored and summarized or aggregated data but brings all the relevant data to the memory. This technology then utilizes intense processing and large amounts of memory to perform all calculations and aggregations while in memory.

Managed Memory Computing blends the best of both methods, allowing users to define data cubes and datasets with pre-structured and aggregated data, providing a logical business layer to users, and offering in-memory computation. These features make the response time to user interactions far superior and enable the most balanced approach between disk I/O and in-memory processing.

The hybrid approach of Managed Memory Computing provides analysis, dashboards, graphical interaction, ad hoc querying, presentation, and discussion driven analytics at blazing speeds, making the Business Intelligence tool ready for everything from an interactive session in the boardroom to a production planning meeting on the factory floor.

3 The Advantages of Managed Memory Computing

- **Response time:** Effective use of aggregated data cubes or datasets and in-memory processing gives users a better experience by providing visually rich presentations at high speeds. Improved response time is possible through the harnessing of the best of the available technology.
- **Optimum use of hardware infrastructure aligned with business needs:** Since the technology balances disk I/O with in-memory processing and offers a choice to select which data cubes or datasets use which technology, the technology manager has the freedom to make Smarten work as per available infrastructure and business needs. A balancing of the use of appropriate technology will provide optimum use of available hardware resources.

- **Freedom of choice:** The opportunity to choose between using the memory for processing and the conventional architecture for a data cube or dataset, making the best of both architectures available as per business needs.
- **Presence of a business layer:** Irrespective of which architecture is implemented, the presence of a business layer within the data integration makes rich analysis on the fly, effortless.
- **Design freedom:** The power of simplicity to design, which Smarten has put in the hand of the users, continues to be available regardless of the architecture chosen.

4 Product and Support Information

Find more information about ElegantJ BI-Smarten and its features at www.smarten.com

Support: support@smarten.com

Sales: sales@smarten.com

Feedback & Suggestions: support@smarten.com

Support & Knowledgebase Portal: support.smarten.com