MetaMatrix is a complete solution for the creation of UML™ data models and the construction of the OMG Model Driven Architecture™ that includes data access. MetaMatrix is a solution that combines an enterprise caliber metadata management solution based on the OMG's UML, XMI™, CWM™, and Meta-Object Facility™ (MOF™) standards with a scaleable, heterogeneous data access technology. Together the MetaMatrix MetaBase and the MetaMatrix Information Integration Server enable the construction of OMG MDA™ for information integration.

Using the MetaMatrix Metadata Modeler, UML-based, platform dependent and independent data models can be captured and managed in the MetaBase from which the MetaMatrix Information Integration Server generates platform specific, run-time data access requests to heterogeneous data sources. The MetaMatrix solution allows applications to be developed to platform independent CWM based data models resulting in significant increases in development productivity and independence from data storage platforms.

The MetaMatrix Server is a highly scalable, all Java solution that provides uniform access to disparate, heterogeneous data sources. The MetaMatrix Server provides an integrated queryable view of all information sources connected to the server as well as the ability to update JDBC compliant sources. The server is complemented with a rich suite of tools that significantly reduces development life cycle for integrating information sources. The integration environment supports relational, object and legacy data sources, as well as, unstructured, flat files, streaming, and time series data sources.

The MetaMatrix MetaBase solution is a best-in-breed metadata management solution adhering to the latest metadata standards. This solution can be used to manage data throughout an enterprise resulting in significant improvements in data usage and the identification and elimination of data redundancy. The components of MetaBase are the MetaData Modeler, MetaData server, and the MetaBase Repository. When coupled with the MetaMatrix Server, the combined MetaBase and Server solution can be used to create an abstraction layer which hides the details of how data is accessed from different sources and provides a consistent, unified programming interface to all the data modeled in the “virtual database.” This combined solution captures design-time physical and virtual metadata that can then be deployed as runtime metadata used by the MetaMatrix Server to construct a “virtual database.” It also results in significant increases in developer productivity and reduces development timeframes for e-commerce solutions.

**MetaMatrix Features:**

**Disparate, Distributed Query Processing.** MetaMatrix includes a query planning and processing engine optimized for accessing data from remote, heterogeneous data sources.

**Extensibility.** MetaMatrix Server is quickly extended to integrate new data sources through the use of metadata and a highly extensible connector framework.

**Highly Scaleable, Fault Tolerant Architecture.** Through its distributed architecture, MetaMatrix provides a reliable, scaleable information integration server. This architecture allows the workload to be spread across multiple servers with redundant components running on different server hardware.
**Enterprise Metadata Model.** MetaMatrix provides a single view of all enterprise information assets, including legacy, relational, and real-time data feeds.

**Cross-Source Data Relationships.** Users can explicitly specify the relationships between data elements that span data sources.

**Asynchronous Data Source Support.** Support for synchronous and asynchronous data sources, such as real-time data feeds provides developers with a broader set of data sources to use in development of robust solutions.

**Single Sign-on Entitlement.** The entitlements system provides a single point of access control and management for the entire integration environment. MetaMatrix can be configured to integrate with external security architectures via pluggable service provider mechanisms.

**Platform Independent.** Created entirely in Java, MetaMatrix products provide the most flexible solution to integrating real-time cross-platform disparate data.