

# Sun™ Master Data Management Suite

Connectivity, integration, and middleware infrastructure solution to create and synchronize master data



## Highlights

The Sun™ Master Data Management Suite offers these benefits:

- Creates integrated, consistent view of master data leveraging current applications, data, and systems
- Dramatically improves visibility of business data across the enterprise
- Delivers real-time, appropriate access to master data
- Enables channel optimization
- Improves productivity, heightens compliance, and reduces costs
- Leads to impressive advances in customer satisfaction, retention, and loyalty

## ➤ Bringing together disparate data sources

Business and government agencies execute better when they make decisions based on complete and accurate information. Having this complete and accurate information, however, becomes more challenging as organizations evolve. As organizations expand into multiple geographies, their information assets become fragmented across database instances managed by a variety of sources. Along with mergers and acquisitions come information assets that must be quickly and efficiently integrated into the parent organization. With operations expanding globally, many enterprises are required to meet compliance regulations in more than one country. The outsourcing trend adds to data dispersion by moving data away from the enterprise's internal resources. These factors create a pressing need for accurate and complete information views, superior quality products and services, increased operational efficiency, and compliance with norms — as well as a cost-effective way to achieve these objectives.

## Building a single, consistent, and appropriate entity view

Because it creates an authoritative, accurate, and secure data environment that represents a “single version of truth,” master data management (MDM) produces an accepted “single best record” that can be employed across a wide range of application systems, lines of business, and user communities.

As a corporate-wide initiative, managing data encompasses the consolidation, cleansing, publication, and protection of reference data residing in core business assets. The end result: Heterogeneous, fragmented data is replaced with homogenous, integrated sources. By offering improved knowledge of customer behavior, better data management helps you make more accurate decisions about product promotions and pricing, while enhancing visibility into patients, citizens, and other related entities, and improving regulatory compliance.

One of the most promising subsegments of MDM, customer data integration builds customer reference data to produce a single, consistent, and consolidated store of information that can be organized and presented into appropriate views for various consumers (for example, the finance view of the customer, the sales view of the customer, and so on). This ability is critical for organizations involved in customer-centric services, especially sales and marketing organizations that want to extract business insights from sales data and customer buying behavior.

For government agencies, creating a single view of citizen interactions across government departments provides improved visibility. This helps solve issues created by fragmented information, which can reduce citizen trust in the government, while negatively affecting employee morale and the outcome of e-government programs.

“Through 2011, 70 percent of SOA projects in complex, heterogeneous environments will fail to yield expected business benefits unless MDM is included.<sup>1</sup>”

1. “Predicts 2008: Master Data Management,” Andrew White and John Radcliffe, Gartner, Inc., February 25, 2008.

### Sun’s solution: The Sun Master Data Management Suite

To help your organization improve the integration and management of customer, citizen, subscriber, and other data, Sun developed the Sun Master Data Management Suite (Sun MDM Suite). The Sun MDM Suite is based on the solid foundation of the Sun Java™ Composite Application Platform Suite (Java CAPS), which provides a comprehensive integration platform for building and managing SOA-based composite applications. This preintegrated, service-enabled, single-view solution merges disparate entity information, while lowering risk through improved data quality and accuracy. The Sun MDM Suite includes a number of vertical industry extensions, including patient, subscriber, citizen, and many more.

As a converged, high-level solution, the Sun MDM Suite utilizes data management capabilities to build appropriate entity views with superior data quality and master indexes. Based on open standards, this connectivity and integration infrastructure solution includes a portal and presentation layer, as well as a framework for security and identity management.

The Sun MDM Suite offers the following benefits for organizations building accurate and complete entity views.

#### *Comprehensive application*

- Eases integration across legacy and packaged applications
- Provides data acquisition, quality management, indexing, and stewardship
- Robust design and runtime environment offers unified development and deployment

#### *Extensible platform*

- Rapidly develop new functionality and extension to new locales
- Framework can be extended to cover future applications and protocols
- Federated identity expands single view to partners

#### *Accessible data*

- Delivers on a component-based, service-enabled architecture
- Layered levels of access offer privacy and security
- Adoptable through community and partner ecosystem

Additionally, Sun offers developers the benefit of transparency and early access, along with the ability to influence and contribute to future Sun MDM Suite enhancements through the open-source community. Unique among leading MDM vendors, the Sun MDM Suite is complemented by the Mural community, part of the vibrant java.net ecosystem. This open-source community allows your organization to learn about the technology and problem domain from peers and industry experts, without an upfront investment. Furthermore, it permits faster innovation in more market segments because of the appeal to independent developers of an open ecosystem.

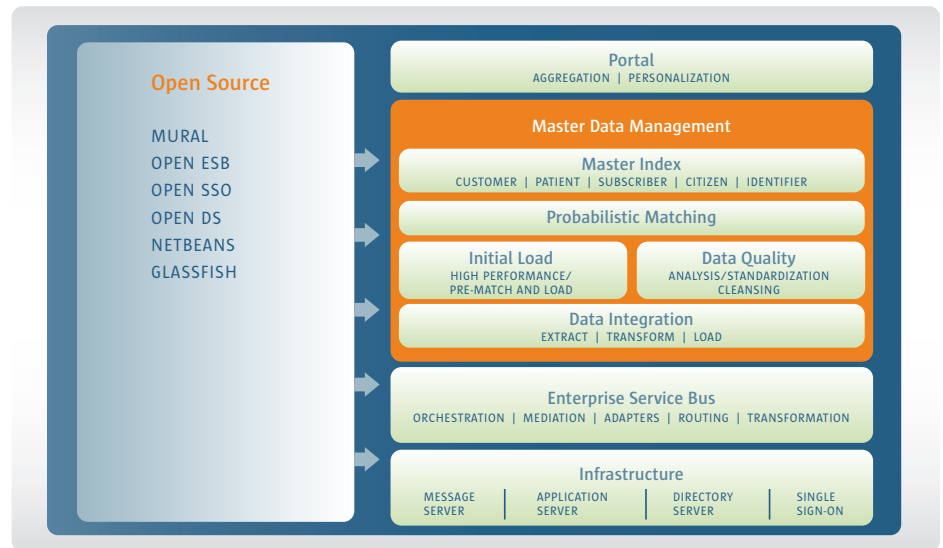
### Using the Sun MDM Suite

Effectively applying MDM technology requires not just establishing the data model, storage, and data quality, but also the management lifecycle that goes beyond solving integrity and quality problems. The technology needs to ensure that the information is made available to diverse consumers and access to enterprise reference information is controlled according to your organizational policy. The Sun MDM Suite provides all of the capabilities required to implement this lifecycle, organized into three phases.

**Create and Update** — Supports source extraction, builds the master index, through appropriate workflows. Additionally, builds the interfaces to noninvasively create and populate the index.

“Through 2010, 70 percent of Fortune 1000 organizations will use MDM as a disciplined process to achieve consistency in commonly shared business information for compliance, operational efficiency and competitive differentiation purposes. By 2010, 30 percent of CDI initiatives will become part of a wider MDM program.”<sup>2</sup>

1. “Predicts 2008: Master Data Management,” Andrew White and John Radcliffe, Gartner, Inc., February 25, 2008.



*Sun MDM Suite leverages open source community innovations for integrating and managing data*

**Synchronize** — Propagates “clean” and “unified” (for example, de-duplicated) information back to integrated systems using services or other noninvasive technology.

**Syndicate** — Creates and manages “virtual” views on the full range of entity information. All access to customers, for example, should be available as services implemented by the MDM in different views such as a finance view or sales view. The Sun MDM Suite automatically decodes these higher-level views to technical operations based on content, decomposing the “get customer” view into a “get customer from SAP” and “get customer from Siebel” view.

In addition to supporting the three phases of the MDM lifecycle, the Sun MDM Suite applies three operational layers on top of the lifecycle, which control and monitor all three of the phases.

**Governance** — Today, even the best access management technology treats resources as static “URLs,” technical implementations of a siloed system operation. The Sun MDM Suite

offers higher-level views and allows the Sun Java System Access Manager to take advantage of them. Therefore, your organization can govern the utilization of MDM services at a “business” level, rather than governing technical services.

**Federation** — With standards like Liberty and Security Assertions Markup Language (SAML), you can also incorporate a trusted business partner’s view of your customer and products. As a leader in the federated identity and access management areas, Sun offers the ability to extend a customer’s reach in a secure and compliant manner.

**Analytics** — The Sun MDM Suite offers extensive reports, alerts, and analysis tools at all three phases, to give your organization visibility into many important aspects of your business data, including the sources of quality problems, histories of the de-duplication activity, audit logs of access, searches for enterprise objects, as well as statistics about the number and kinds of master data errors encountered.

### Sun MDM Suite products

**Sun Master Index Software** manages and leverages the overlapping and redundant data within disparate systems by uniquely identifying common records and using data cleansing and matching technology to automatically build a cross-index of the many different local identifiers that represent the same entity. Applications can then use this single master index to get a comprehensive view of a person or entity.

**Sun Data Integrator Software** is optimized for high-performance extraction, transformation, and loading (ETL) of bulk data between files and databases. It provides an ETL development and runtime environment that is fully integrated into the Sun MDM Suite and specially optimized for processing very large record sets. Sun Data Integrator software works with the Sun Master Index software to dramatically shorten import time of large data sets for MDM.

**Sun Enterprise Service Bus Software** is a Java technology-compliant, Web services-based, pluggable integration platform that incorporates the Java Business Integration (JBI) standard to allow loosely coupled components to communicate with each other through standards-based messaging. It provides core integration, including comprehensive application connectivity, guaranteed messaging, and robust transformation capabilities, as well as a unified environment for integration development, deployment, monitoring, and management.

**Sun Business Process Manager Software** enables long-lived, process-driven integration. It provides the ability to model, test, implement, monitor, manage, and optimize business processes that orchestrate the flow of activities across any number of Web services, systems, people, and partners. It delivers an open, graphical modeling environment for the industry-standard business process execution language (BPEL).

**Sun Java System Access Manager** delivers open, standards-based authentication and policy-based authorization within a single, unified framework for the support of composite application integration. It secures the delivery of essential identity and application information on top of the Sun Directory Server Enterprise Edition and scales with growing business needs by offering single sign-on as well as enabling federation across trusted networks of partners, suppliers, and customers.

**Sun Directory Server Enterprise Edition (DSEE)** builds a solid foundation for identity management by providing a central repository for storing and managing identity profiles, access privileges, and application and network resource information. The Sun DSEE enables mission-critical enterprise applications and large-scale extranet applications to access consistent, accurate, and reliable identity data.

**Sun Java System Portal Server** provides a user portal for collaboration with business processes and composite applications layered on top of legacy and packaged applications that are integrated using business integration components within the Sun MDM Suite.

**Sun Adapters** provide extensive support for integration with legacy applications, packaged applications, and data stores through a combination of traditional adapter technology and modern JBI and Java Connector Architecture (JCA) standards-based approaches.

### Building and deploying advanced MDM projects

In addition to the business challenges of MDM, organizations often face performance and productivity challenges when embarking on an MDM project. The volumes and throughput requirements often overwhelm an otherwise well-planned architecture, and complex projects can involve a sophisticated design/build/test/deploy/measure lifecycle that needs to complement an existing IT development policy. That's why the Sun MDM Suite includes two key components: Sun GlassFish™ Enterprise Server and the NetBeans™ development platform.

### Learn More

For more information about the Sun MDM Suite, visit [sun.com/mdm](http://sun.com/mdm)

For more information about Sun SOA, visit [sun.com/soa](http://sun.com/soa)

For more information about Sun Identity Management, visit [sun.com/identity](http://sun.com/identity)

For more information about Mural, an open MDM community, visit [mural.dev.java.net](http://mural.dev.java.net)

Join Integration Insights  
[sun.com/soa/subscribe](http://sun.com/soa/subscribe)

Sun GlassFish Enterprise Server is an award-winning, high-performance implementation, which adheres to the latest Java Platform, Enterprise Edition (Java EE) 5 standards. The NetBeans development platform is a rich IDE for coordinated building, testing, and deploying complex applications in diverse development environments.

### Why Sun for MDM

Fulfilling the promise of MDM is not an easy task. It calls for extensive expertise, a strong commitment to open-source technology and communities, as well as a global presence. For these reasons, CIOs and information management professionals have increasingly turned to Sun to deliver MDM solutions that can provide the organizational, technology, and process improvements that can measurably improve operational performance.