

Material Data Management

- Optura Material Data Management is a prepackaged composite application that works within existing ERP systems to streamline and automate the process of setting up material master records. Material masters can be created by any authorized personnel from any location while central management helps enforce creation policy and control input collection and workflow routing. Optura Material Data Management delivers out-of-the-box best-practice processes for master data record setup, creation and upkeep in an accurate, orderly and timely manner.

BACKGROUND

Material masters are created to account for any materials that are procured, produced or stored by a company. The accurate creation of bill of materials for products, projects or services is vital to the success of a company—all departments look to this information (or a portion of it) to determine procurement, planning, production, inventory management and accounting processes. Without accurate material master data, the ability to buy, build and ship a product or deliver services in an accurate and timely manner is impacted.

For many organizations, the setup of material master data—whether it is raw material, finished product, or any type of processed goods—is typically manual in nature. This manual business process results in long cycle times for setup, inaccurate and duplicate data in the ERP system, and inconsistent data across departments or regions. The results can be skewed inventory valuations, inaccurate shipping estimates, and delayed delivery of goods and services.

Optura Material Data Management provides participants across the product value chain an automated, timely and accurate method of participating in the creation process while ensuring consistent business practices with enforced business rules for the setup of material masters across departments and geographies.

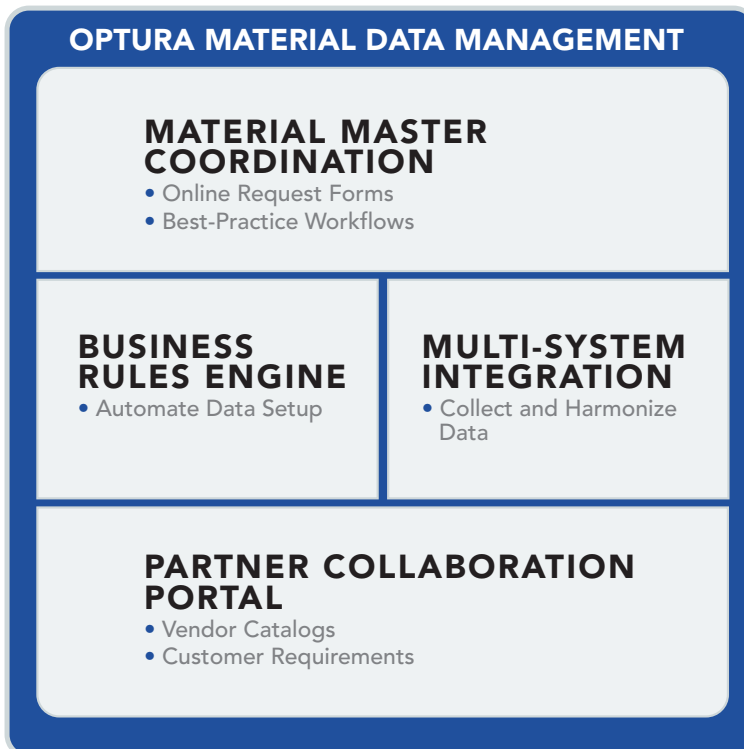
PRODUCT OVERVIEW

Optura Material Data Management provides for the creation of new material masters with viewing and modification capabilities for all associated stakeholders. As a composite application, Optura Material Data Management integrates with existing planning, production, ERP, engineering, and document management systems. Material master forms can be routed as part of established workflows and accept modifications as well as provide data that is consumed by other applications or production processes regardless of system type or user platform.

Features available with Optura Material Data Management include:

- **Centralized Control**—The processes for creation, routing, updating and controlling material masters are centralized. All information is updated in the main production system where it is available to any process that needs access. Control can be maintained for conformity, adherence to policies, and for archiving.
- **Decentralized Data Entry**—Distributed departments are able to create, access and update material masters from any location over the Internet. Purchasing, accounting, engineering and procurement can all update quantities, schedules, locations and classifications and view forecasts and status—regardless of their location.

- **File and Data Sharing**—Copy, reference or share information from existing material records or supporting files.
- **Process Control and Visibility**—Users are provided visibility into the workflow of material masters with the ability to see location and status.
- **Flexibility and Customization**—In addition to standard best practices for material master creation and routing procedures, Optura provides the ability to customize record creation, routing, and data collection.
- **Automated Workflow**—Optura Material Data Management provides automated workflow between applications, systems, departments and individuals. Workflow accommodates business rules, approvals, and input and output to various processes and applications.
- **Business Rules**—Creation of business rules helps enforce policies and ensure compliance with ranges and tolerances. Master record fields can be automatically populated with default field values based on business rules.
- **Automatic Notification** - Users with ownership interests can receive notification when material creation request is approved and when material masters are created.
- **Escalation/Postpone Procedures**—Workflow accommodates uncommon circumstances with escalation or postponement procedures.
- **Dashboard Access**—The Material Data Management user interface is graphical, intuitive and provides a dashboard view of material master status and information. Category tabs and drill down methods provide easy and fast access to all relevant information.
- **Real-time Validation**—Input fields can be validated against ERP system data in real time based on best practice or customized business rules.
- **Reporting**—Optura provides reports showing visibility into the material master creation process, including cycle-time, and bottlenecks. Reports include number of materials created, status, productivity of organizational units, and cycle time for creation (wait/working/total)—all with graphics relating to process or processors.
- **History**—Information and comments on creation, updates, status, access, routing and more can be added and tracked with each record.



Optura Material Data Management streamlines creation of material masters with workflow, reporting and collaboration which provide visibility through the entire process.

In addition, Optura Material Data Management is adaptable across industry sectors. The following chart illustrates versatility and the requirements for material master creation across industry types.

Industry Category	Heavy Manufacturing	Light Manufacturing	Distribution
Category Characteristics	<ul style="list-style-type: none"> • Materials are typically low volume but high complexity • Material masters are created in groups with types including raw materials, components, works-in-progress and finished goods • Material masters require association of manufacturing or production related data • The organization is complex • Experts contribute specialized knowledge such as engineering to the process 	<ul style="list-style-type: none"> • Materials are of medium complexity • Approvals are up front • Needs focused on production and purchasing planning • Many materials created with similar attributes or requirements 	<ul style="list-style-type: none"> • High number of material master records • Most materials are purchased • Low material master complexity with most fields defaulted • No production planning required • Materials may be from supplier catalogs

HOW OPTURA MATERIAL DATA MANAGEMENT WORKS

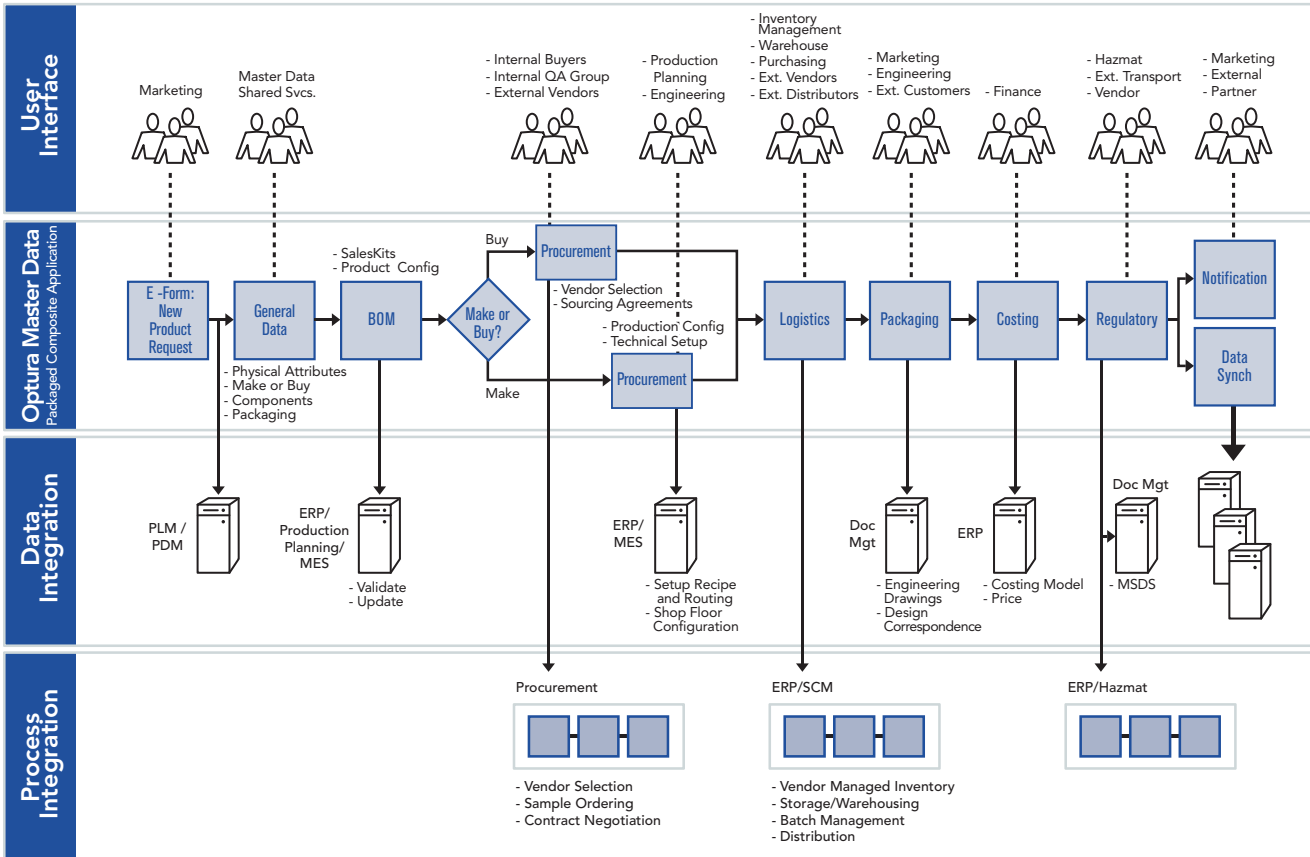
Optura Material Data Management provides a high-level process flow for the setup, creation, review and activation of material masters. It works in conjunction with standard ERP systems and provides best-practice processes for setup of new masters, using workflow routing to obtain input from the right department at the right time to set up new products, bill of materials, routings and recipes.



Optura Material Data Management provides material master creation, review and activation services.

The Optura Material Data Management composite application layer provides Web-based access for all stakeholders including the material master group, marketing, procurement, engineering, production, inventory management, finance and external partners. It integrates seamlessly with existing systems such as product development or life cycle management, enterprise resource planning, supply chain management and document management systems providing input and receiving output for further processing.

OPTURA MASTER DATA MANAGEMENT (MDM)—PACKAGED COMPOSITE APPLICATION



Material masters are created with input, visibility and integration across the organization.

Through the process, material records are created, routed for additional data collection and approval and then routed to the master data group for review. The master data group reviews the record and then directs additional routing via the Optura Material Data Management dashboard. The dashboard provides access to three general categories of operations under three process tabs. These three tabs are general, routing, and status and include the following options

General Tab

- Displays number of days until product is needed, plus alerts
- Suggests additional material views that need to be created
- Suggests the order in which these views should be created based on business rules
- Specifies the material views that are mandatory or optional

Routing Tab

- Suggests the individuals that need to create the additional material views
- Allows master data coordinator to “skip” the creation of a material view
- Modifies routing from defaults allowing decentralized creation or rerouting with comments for further input
- Enables population of material views for management at the plant level

Status Tab

- Displays current status of each material view
- Displays persons populating material view
- Displays process timing flow
- Enables edits, extensions to other organizations, and addition of comments and instructions

The screenshot displays the 'Material Master Creation WFI Dashboard for Material 609'. At the top, there are menu options: 'Options', 'System', and 'Help'. Below the menu is a toolbar with various icons for file operations and navigation. The main title is 'Material Master Creation WFI Dashboard for Material 609'. Below the title is a navigation bar with buttons: 'Create/Change', 'Copy View', 'Edit Comments', 'Modify Org Level for Not Created Views', 'Display Workflow Log', and 'Filter'. The dashboard is divided into two main sections. The top section is 'Material Basic Data' with the following information: Material No. : 609, X-plant Status, Need Date 05/27/2003, Material Type : HA..., and Description : One Touch Product 1. The bottom section is a tabbed interface with 'General', 'Routing', and 'Status' tabs. The 'Routing' tab is active, showing a table with columns: View, Description, Plant, Org, Skip, Revise, Responsib..., Resp.User, and Status. The table contains the following data:

View	Description	Plant	Org	Skip	Revise	Responsib...	Resp.User	Status
K	Basic data			<input type="checkbox"/>	<input type="checkbox"/>		MDA	Created
V	Sales	3000		<input type="checkbox"/>	<input type="checkbox"/>	SCA		Not created
E	Purchasing	3000		<input checked="" type="checkbox"/>	<input type="checkbox"/>	Purchasing		Not created
D	MRP	3000		<input type="checkbox"/>	<input type="checkbox"/>	MDA		Not created

Material Data Management dashboard provides easy access to master content with history, status, recommendations and the ability to update and route forward.

BENEFITS

Implementing Optura Material Data Management provides multiple advantages for enterprise companies seeking to streamline material master creation across departments and locations. Major benefits include:

- **Reduced Cycle Times**—Faster setup of new products shortens time to market. Automated classification and routing plus online collaboration speed the process of creating and processing material masters. Reduced cycle times enable rapid prototyping and speed product availability.
- **Increased Productivity**—Automated processes reduce manpower requirements for repetitive processes and eliminate manual re-keying and re-work. Headcount can be refocused on activities that are business positive while research, problem querying, and manual routing are eliminated.
- **Lower Costs**—Increases in productivity save money and allow companies to achieve higher productivity in a shorter time with less cost. Investments in ERP systems are preserved and leveraged to provide additional services at minimal expense.
- **Accurate ERP Data**—Information residing in ERP systems is more accurate due to controlled access, automated processes based on business rules, and effective routing to appropriate parties. Accurate data leads to benefits such as correct inventory valuations.
- **Streamlined Communication**—Organizations benefit from better interdepartmental communication and in turn are more efficient and effective with coordination, production, fabrication, construction, and costing. Optura Material Data Management streamlines and simplifies workflow for more effective communication and consistent processes throughout the organization.

THE TECHNOLOGY

Optura Material Data Management works in conjunction with existing ERP systems such as SAP to improve workflow and collaborate inside and outside the application. Application logic resides both inside the ERP system and external to the ERP system in a middleware layer based on J2EE application standards. As a composite application, Optura Material Data Management interacts with legacy applications, providing input and acting as a user agent.

Key components of the Optura Material Data Management solution reside on an application server, using connectors and J2EE portal technology. Optura pre-packaged solutions work with all major application server products such as IBM WebSphere and SAP NetWeaver. Optura's expertise is in performance tuning the integration point with the legacy system using the Optura Transaction Control Engine™ (OTCE) and ERP specific connectors. The OTCE combined with Optura's messaging, portlet adapters, and Web services provides a powerful and flexible platform for state-of-the-art composite applications.

With Optura SAP solutions, a pre-packaged application lives inside SAP and utilizes the existing SAP Workflow/WebFlow engine. The solution uses SAP code and has been developed using native SAP technology - namely tools in the ABAP Workbench such as dialog programs, function groups, business objects, workflow definitions, roles, customizing tables, reports, etc. Optura SAP composite applications do not include any modifications to SAP core code and all code associated with these solutions exists in a separate namespace (beyond SAP 4.0B) or as a "Z" prefix (for SAP 4.0B). Some applications utilize standard SAP user-exits and, in these cases, the ABAP code required for the user-exit is not included in the transports, but is inserted manually and documented separately.

LEARN HOW TO ...

Optura Material Data Management is a prepackaged composite application that installs quickly and integrates flawlessly with SAP and other ERP systems. Businesses that implement Material Data Management can streamline the process of creating, updating, routing and activating material masters while experiencing a rapid return on their investment. Learn how to simplify your material master management today by calling Optura at **480.488.3040** or visit **www.optura.net**.

SARBANES-OXLEY COMPLIANCE

The Sarbanes-Oxley Act, Section 404 requires that public companies must implement internal financial processes with standard, pre-defined, visible steps. Optura Material Data Management assists companies in complying by providing established workflow based on standard, best-practice policies with visibility and historical reporting through the entire process.

Optura helps companies comply with Sarbanes-Oxley using:

- Processes that deliver control as well as optimization
- A collection of standard, pre-packaged solutions
- Visibility into workflow and processes
- History and tracking information

