

# ORACLE AND SEEBURGER: OPTIMIZING THE AUTOMOTIVE SUPPLY CHAIN



## ORACLE AND SEEBURGER PROVIDE OEMS AND SUPPLIERS WITH:

- EDI integration, transaction management, monitoring, and analytics
- Supplier relationship management
- Demand scheduling and execution
- Sales and order management
- Procurement
- Manufacturing and lean execution
- Finance management

*As the automotive industry transitions from a localized supply chain operation into a highly distributed cross-functional global marketplace, OEMs and suppliers are forced to battle fierce competition, efficiently manage increasing product complexity, comply with rigorous government legislation and respond rapidly to ever-changing customer requirements.*

*While surmounting these challenges is the rigor for survival, achieving a sustainable competitive advantage requires automakers to facilitate easy flow of information from customers and back through their extended enterprises, ultimately turning their supply chain operations into information-driven value networks.*

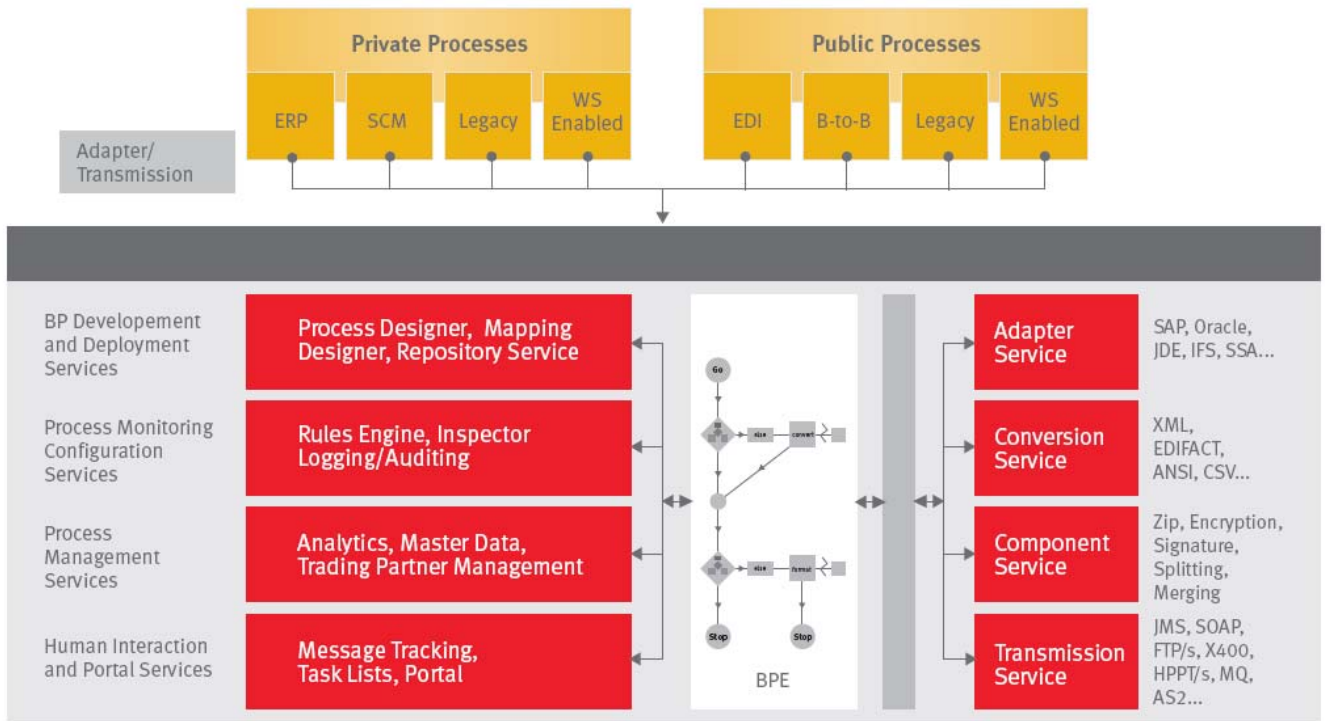
### **Business-to-Business Gateway**

Oracle and SEEBURGER provide OEMs and suppliers with B2B collaboration solutions on a scalable business integration platform that seamlessly integrates internal systems, business processes, and trading partners. By automating trading relationships throughout the supply chain, Oracle and SEEBURGER provide automakers with a transaction platform that supports a variety of processes including:

- Development
- Execution
- Management
- Monitoring
- Analytics
- Human Interaction

### **Development**

This is the stage at which specific business processes are developed and deployed. For instance, one process of an orders-to-cash system involves receipt of an inbound order from a retailer and processing it through to the ERP system. This may involve numerous individual steps: the order moves through a communication component (e.g., EDIINT AS2); upon receipt, the file must be analyzed for its content and payload, which requires the appropriate translations and routing rules; next, many organizations will examine the translated Sales Order and perform data validation or real time inventory checks; finally, the document proceeds to an adapter, which posts it into the ERP system. Together, these individual technical steps create an end-to-end B2B process, one which is necessary for even the simplest EDI transaction.



**Figure1. SEEBURGER'S B2B Gateway is a SOA-based integration platform which integrates multiple applications and external data sources. A common development environment provides shared tools for business rule design, partner management, monitoring, and process execution.**

**Execution**

Process execution refers to the point at which a specific business process is carried out, based on specified rules or triggered by specified events. For instance, a document from a customer contains invalid data. The appropriate business process of declining the order, triggered by the occurrence of the invalid parts numbers, will execute automatically.

**Management**

Process management refers to the ability to constantly assess and refine an enterprise's business processes to ensure they achieve the specific strategic objectives of the enterprise, whether those objectives are providing more competitive products and services, reducing costs, improving customer service, or speeding reactions to changing market conditions. Effective tools enable IT and business analysts to easily set up process meta data and technical components, as well as simplify ongoing maintenance of the solutions required for efficient B2B processes.

B2B Gateway provides solutions for the three most challenging areas: trading partner management, administration of business processes, and system management.

A trading partner community presents constantly evolving conditions that can

challenge the efficacy of existing business processes. Networks continuously become more complex, increasing the difficulties of administering EDI throughout multiple locations. When changes are required, massive administrative efforts can be required to ensure that changes occur at every appropriate point in a process or system location. SEEBURGER's B2B Gateway simplifies this potentially laborious task through its **trading partner management (TPM) module**. This includes centralized, comprehensive master data administration of all partners, which means changes to the entire partner relationship are stored and altered in a single data store, not multiple systems. The TPM component also provides a hierarchical picture of the trading partner structure, which eliminates redundant rule collection for external data interchange. Standard partner management templates handle all enveloping, identifiers, mappings, and error processes. The module also provides a development environment in which processes and forms can be refined. This approach, unique to SEEBURGER, allows an organization to customize the information in a format which best suits its business processes rather than requiring the enterprise to squeeze its business model into the solution, as with other technologies. SEEBURGER recognizes the value of retaining the characteristics that make an enterprise unique and provides solutions flexible enough to fit into a business model seamlessly.

### **Monitoring**

No business integration platform would be complete without the presence of monitoring capabilities to ensure all processes are operating smoothly and as intended. The B2B Gateway includes central monitoring of all running processes and their status including the monitoring of all involved data. This includes central monitoring of all adapters, transport, translations and components. From end to end, this single monitoring functionality enables easy re-processing of errors at the point of failure. Comprehensive support of exception handling and alerting provides a strong foundation for an exception management approach to fixing errors.

### **Analytics**

Process analytics refers to the ability to generate internal statistics on system operations as well as on the details of trading partner activities. Effective analytic tools enable an enterprise to assess trends in partner activities as well as detect weaknesses within a process that can be refined and improved. SEEBURGER's B2B Gateway analytics module enables generation of statistics based on selectable data stored from ongoing and archived processes and messages. For instance, an enterprise can analyze how many transactions a specific trading partner engaged in over the past 30 days, as well as how many failed transactions occurred within that same time frame. To facilitate long-term archiving activities, the B2B Gateway also features comprehensive support of leading archival systems (e.g., IXOS, Livelink).

### Human Interaction

Regardless of how effective automated business processes are, there is always a need for human interaction and intervention at specific points. For instance, an invoice may not match a purchase order in the ERP system; in this case, an effective process will trigger an alert to the appropriate manager to review and approve before continuing to route the invoice.

### Business to Business (B2B) Portal

SEEBURGER'S B2B Portal provides comprehensive tools for trading partner enablement as well as process visibility that interact seamlessly with capabilities of the B2B Gateway.

#### Trading Partner Enablement

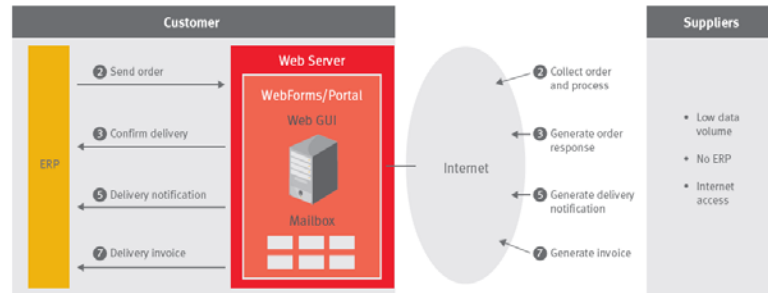
Creating the trading partner community establishes the foundation for an information-driven supply chain, so the ability to achieve 100% trading partner enablement is vital. This can be particularly challenging with smaller suppliers who lack the resources to communicate electronically without partner provided solutions and support.

Innovative B2B Portal solutions for 100% trading partner enablement include **Rollout Services**, which manage the onboarding process in a graphical format. With these services, trading partners of every size have a single point of entry in a user-friendly format that walks them through each onboarding step with explicit directions and support. Via a tracking interface, enterprises can monitor the progress of their partners and lend additional assistance where necessary. **Partner Self-Service** functionality puts partners in charge of their own accounts for many administrative details, reducing the burden on enterprises while empowering partners with greater autonomy. Enterprises at the helm of trading communities comprising thousands of partners realize significant efficiencies by delegating these tasks yet maintaining control via tracking and auditing capabilities.

The B2B Portal's **small supplier connectivity solutions** exemplify SEEBURGER's commitment to trading partner enablement. The **Hub and Spoke** solution is a centrally managed add-on component that enterprises can distribute to smaller partners. The enterprise operates the Hub element, which is fully integrated with its B2B Gateway, to define data that must be shared with partners. This information is shared via the "Spoke" component, a small down-loadable Java application that allows the smaller partner to perform translation, communication, and integration. In short, the "Spoke" enables small partners to enter into electronic commerce at a fraction of the traditional cost, thus removing the key barrier for many smaller partners.

**Partner Portal** provides another connectivity option. Using a standard web browser, smaller or low volume partners can connect to the enterprise for a wide range of business activities, such as generating invoices, advanced shipping notices, and bar codes (see Figure 6). This Portal is much more comprehensive than the standard WebForms deployed by many organizations in the past. Smaller

suppliers can implement complete inter-related business processes with this Portal, including the ability to ship partial shipments or adjust order quantities in an acknowledgement back to the Hub. These capabilities are especially necessary when working with Asia-based suppliers who typically have limited experience with B2B. By providing a complete Partner Portal in the local language (e.g. Chinese), the Hub can offer a solution that benefits both parties equally.



**Figure 2: SEEBURGER'S Partner Portal offers one connectivity solution for small suppliers. Using a standard web browser, smaller partners can conduct key business activities such as generating invoices, advanced shipping notifications, and order responses within an enterprise's integrated business process environment.**

### Demand Scheduling and Execution

Oracle's JD Edwards Demand Scheduling Execution module satisfies the requirements of an OEM, Tier 1 supplier, manufacturer or distributor that sends/receives customer requirements in the form of a series of material and sequenced demand requirements to confirm to a forecast and shipment schedule. The Demand Scheduling Execution solution provides an accurate picture of the flow of goods between OEMs, suppliers and distributors. It improves tracking of constantly changing customer demand, is adaptable to customer/OEM standards and processes, and ensures contractual compliance.

Specifically, Oracle's JD Edwards Demand Scheduling Execution module provides automakers and distributors with:

- Fully integrated from EDI (or manual entry) thru to Sales Order Management, Inventory, Warehouse, Transportation and A/R.
- Cumulative quantity management capabilities to monitor quantities shipped, received and reconciliations functionality.
- Tailored inbound demand calculations to conform to customer/OEM mandates and assist in consolidating demand across different customers and products.
- Transportation shipment sequencing corresponding to the OEM's requirements.
- Automatic creation of advanced ship notices (ASNs) to keep customers fully informed on impending product shipments.

## Sales Order Management

With Oracle's JD Edwards EnterpriseOne Sales Order Management, automotive OEMs and suppliers can rapidly configure products, evaluate pricing options, provide up-sell and cross-sell suggestions, verify delivery dates, calculate freight, and check customer credit—all from a single window.

Integration with JD Edwards EnterpriseOne Inventory Management allows automotive manufacturers and suppliers to view available inventory during order entry as well as make delivery promises based on real-time available-to-promise, capable-to-promise, and profitable-to-promise information. Online customer information includes order history; ship-to, bill-to, and deliver-to information; credit status; and payment terms, as well as price history and sales-line profitability. Integration with Oracle's JD Edwards EnterpriseOne Product Variants module enables automakers to take orders for multi-attribute items quickly and efficiently and, because JD Edwards EnterpriseOne Sales Order Management is also integrated with JD Edwards EnterpriseOne manufacturing, warehouse and transportation modules, the status of any order is visible at any stage of the fulfillment cycle.

## Procurement

Oracle's JD Edwards EnterpriseOne Procurement Management is an integrated procurement management solution that helps automotive OEMs and suppliers maximize margins, optimize inventory levels, minimize supply chain disruptions, and effectively manage downstream suppliers. The solution allows automotive manufacturers to quickly and efficiently process requisitions, purchase orders, RFQs, quotations, and receipts.

Specifically, Oracle's JD EnterpriseOne procurement management solution enables automakers to:

- Develop purchasing specifications, prepare lists of bidders, issue inquiries, tabulate and evaluate bids, and track orders to vendors and sub-vendors – keeping projects on schedule and on budget.
- Manage orders, review and approve requisitions, manage inbound inventory, and track supplier performance.
- Real-time access to inventory levels, expected deliveries, and projected demand, all of which significantly impact your buying decisions.
- Procurement management solution is integrated to JD Edwards EnterpriseOne Advanced Pricing, which allows you to take full advantage of the variety of pricing scenarios offered to you by your suppliers.

Furthermore, the Procurement Management's bid-to-final payment audit trail, enables OEMs and Tier 1 suppliers to consolidate partnerships to those suppliers who maintain the best performance over time. This provides the capability to monitor trends for each supplier in the critical areas of delivery, quality, and price. The system also tracks lead times, quantity early, and quantity late based on specific definitions of acceptable time variance for delivery. Quality analysis measures the percentage of received items that fall within defined tolerances. Comprehensive price information compares inventory, order, receipt, and paid costs by item. Specifically, the Supplier Analysis module enables automotive OEMs and suppliers to:

- Verify compliance with contract terms.
- Identify existing and potential trouble spots.
- Provide information that helps supply partners implement operational and service improvements.
- Tie performance to future contract negotiation.

### **Manufacturing**

Oracle's JD Edwards EnterpriseOne Manufacturing - Lean Execution eliminates multiple data entry by providing a single-user interface to a multi-level back flush engine. By setting up a pull production environment based on customer demand, you are able to implement lean manufacturing practices to operate your plant more efficiently, with less waste and increased flexibility. Specifically, Oracle's JD Edwards EnterpriseOne Manufacturing with Lean Execution capabilities enables automakers and suppliers to:

- End item and sub-assemblies completed through a single user request.
- Report on material and labor for all levels of components with multi-level backflushing.
- Utilize "pull" production verses "push" production.
- Integrate mixed-mode flow manufacturing.
- Not require work orders.
- Define demand based on item number or sales order.

### **Financial Management**

To manage payables, Oracle's JD Edwards EnterpriseOne Accounts Payable provides the integration and flexibility you need to streamline and personalize your accounts payable operation. You can enhance supplier relationships by fulfilling payment obligations in an accurate and timely manner. With automated discount calculations and prepayment support, you can ensure that your cash management is

both efficient and effective. Specifically, Oracle's JD Edwards EnterpriseOne Accounts Payable enables automotive OEMs and suppliers to:

- Negotiate More Favorable Supplier Contracts
- Streamline Invoice Processing
- Improve cash management

For managing receivables, Oracle's JD Edwards EnterpriseOne Accounts Receivable streamlines and accelerates the process of applying receipts, allows OEMs and suppliers to view current account balances, and improves the communication between billing, credit, and collection departments. Because it tracks payment information instantaneously, OEMs and suppliers can gather statistical information about payment habits and history to improve customer support and cash flow. The ability to establish user-defined rules and defaults on a customer-by-customer basis eliminates user error and improves processing consistency. OEM and supplier finance departments gain the accurate, real-time information they need to make immediate decisions about extending credit, forwarding collections, and managing cash flow. Specifically, Oracle's JD Edwards EnterpriseOne Accounts Receivable enables automotive OEMs and suppliers to:

### **Conclusion**

*As world leaders in B2B integration technology and automotive industry-specific applications, Oracle and SEEBURGER provide OEMs and suppliers with a unique combination of standards-based tools for global collaboration and seamless integration for EDI, demand scheduling, procurement, manufacturing and financial management—enabling automakers to optimize their supply chains.*

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