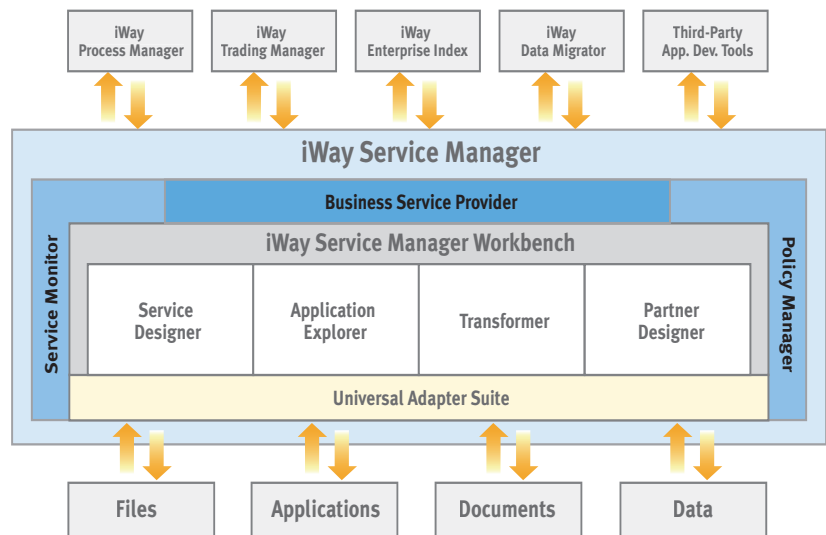


Enhance IT alignment and governance through the cost-effective design, maintenance and management of a service-oriented architecture that leverages existing functionality and data assets.

### Unique Features

- **Replicates business' event-driven nature** within graphical workflows, independent of underlying technology
- **Streamlines business processes** by managing reusable services and handling real-time events
- **Accelerates integration project timelines and reduces maintenance costs** by using a common GUI for codeless interface implementation
- **Increases agility** through code minimization and better skill-set management
- **Enables IT to become more process centric** and adopt a reuse culture
- **Simplifies skill sets needed for design, deployment, and maintenance**
- **Reduces TCO: project cost and ongoing maintenance cost**
- **Reduces time to market**
- **Creates a scalable business architecture** by shielding process-centric developers from the complexity of existing systems so that they may focus on process, not low-level technology

## iWay Service Manager



iWay Service Manager is an open-transport Enterprise Service Bus (ESB) that provides a single platform for SOA and EDA, and extends to B2B service design and deployment.

## An ESB Foundation for Enterprise SOA

iWay Service Manager is a unique and powerful Enterprise Service Bus (ESB) that enables organizations to create, compose, and manage services – whether invoked as Web services or through other interfaces. It also provides event-driven integration and B2B interaction management and, unlike other ESBs, it interoperates with proprietary technologies as well as industry standards.

By helping organizations reuse existing application and infrastructure investments to create powerful and reusable Web services, iWay Service Manager lays the foundation for service-oriented architecture (SOA) and event-driven architecture (EDA). Specifically, iWay Service Manager:

- Optimizes the utilization of an organization's most skilled and expensive IT resources by reducing and encapsulating IT complexity
- Eliminates most custom integration code
- Simplifies the skill sets needed for design, deployment, and maintenance of services

This mitigates project and maintenance risk, speeds project implementations, and reduces project cost as well as the ongoing cost and risk of maintenance.

Ultimately, organizations benefit through faster delivery of cost savings and new revenue generation, easier business process changes, better management visibility into IT projects, and lower TCO for integration projects.

### **Significant Characteristics of iWay Service Manager**

**Drastically reduces the TCO of integration.** For a fraction of the cost of traditional EAI tools, iWay Service Manager provides greater interoperability and superior ease of use. This allows organizations to use personnel with lower-cost, easily available skill sets during development and maintenance. Consultants and corporate developers alike benefit from iWay Service Manager's ability to create powerful, reusable services from disparate technologies – without writing custom integration code.

**Provides the industry's most complete support for service-enabling disparate enterprise technologies.** Most systems in use today were built using standards, practices, and technologies that have been superseded. iWay easily service-enables these non-standard, mission-critical systems for incorporation into a standards-based service-oriented architecture.

**Doesn't require proprietary messaging or platform technology.** Mature IT shops frequently have at least one messaging technology in place, each using a proprietary interface or a slightly different interpretation of the JMS standard. Instead of requiring a rip-and-replace of these messaging systems, iWay Service Manager runs on top of WebSphereMQ, TIBCO Rendezvous, a variety of JMS implementations, and 26 other commonly used protocols. In fact, many iWay Software customers use this messaging interoperability to integrate multiple integration environments. Similarly, iWay Service Manager can deploy to a standalone Java™ Virtual Machine, open-source J2EE™ application servers, or any significant commercial J2EE application server.

**Decentralizes development while centralizing management.** iWay Service Manager provides a unique combination of distributed runtime environments, easy-to-use graphical tools, and centralized monitoring and policy management. This allows system experts to create the application services needed by the rest of the enterprise, while business process-oriented developers can create and modify services and processes they need to achieve business goals. Centralized policy management and monitoring helps operations and business process owners ensure that they're meeting service-level agreements.

**Supports an incremental integration approach.** To reduce the risk of failure, project managers usually must reduce risk by limiting project scope. Unlike many products that require a “big bang” approach, iWay Service Manager provides the ability to meet short-term goals quickly – but unlike other, less sophisticated tools, it can incrementally deliver enterprise-caliber infrastructure to manage real-world integration and application development requirements.

**Draws on 30 years of experience with complex, heterogeneous systems.** iWay Software's 2000-plus customers – and the thousands of additional customers using iWay technology through our parent company, Information Builders – have provided the environments, business requirements, and scenarios that have driven product development from enterprise reporting

to B2B integration to SOA middleware. Few companies have iWay Software's experience with solving problems that involve diverse systems, complex environments, and difficult requirements.

## Key iWay Service Manager Features

### Service Design and Composition Capabilities

iWay Service Manager eliminates translation, interface, and process code using a complete integrated services design environment. Events (the messages sent from one system to another, including service request and response events) and services (the processes invoked when iWay Service Manager detects events) are defined easily in a sophisticated yet easy-to-use graphical environment. The associated reduction of project cost, risk, and length enables more responsive, business-aligned IT departments, and helps IT departments focus on business processes rather than specific technology skills.

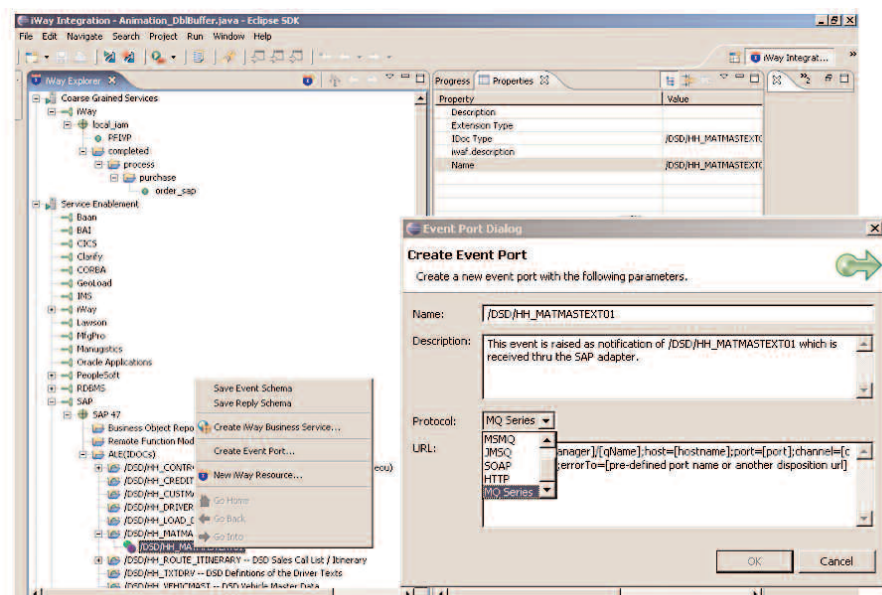
### Service Enablement: iWay Application Explorer

iWay Application Explorer simplifies one of integration's most expensive, risky, time-intensive tasks – the creation and maintenance of secure, reliable services that reuse existing enterprise systems. Using the iWay Universal Adapter Suite, it translates proprietary API calls into consistent XML-based services. Users can call these services from any platform, using any supported service invocation method, including Web services, JCA, and a variety of other standards.

With iWay Application Explorer, users can service-enable existing functionality with a few mouse clicks. Instead of relying on highly skilled programming resources to develop hard-to-maintain integration code, service creators simply:

- Log into an application or other system
- Find the required transaction or functionality
- Generate XML schemas to define service and event message formats
- Deploy the service or event to the required deployment environment

The iWay Universal Adapter Suite allows you to service- and event-enable your existing IT investments without coding.



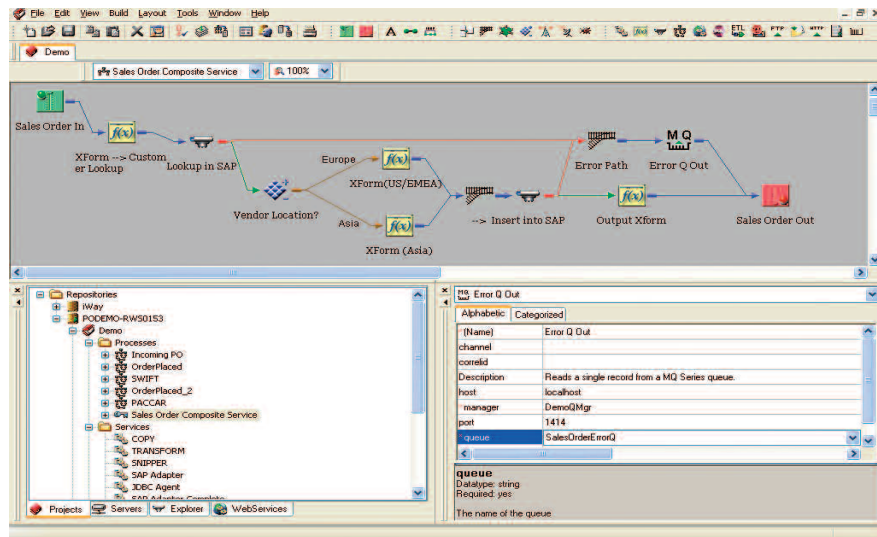
## Service Composition: iWay Service Designer

Most low-level services contain application-specific data and must be used with application-specific considerations in mind. This inhibits reuse: interfaces for reusable services should avoid any application dependencies whatsoever.

iWay Service Designer, a full-featured service composition tool, allows service creators to compose high-level, coarsely grained, business-oriented services from low-level, finely grained, application-oriented services. Service design can include transformations, intelligent routing rules, exception handling, and finely grained service calls.

After defining coarsely grained services, users deploy them for exposure with iWay Application Explorer as iWay Business Services. In that way, coarsely grained services and finely grained services share the same level of reuse and other benefits that iWay Service Manager provides.

Technical process flow orchestrates required logic and interactions with a packaged application system.



## Transformation: iWay Transformer

iWay Service Manager can execute far more sophisticated transformations than most enterprise service buses. Unlike basic XSLT engines that only handle XML-to-XML transformations, iWay Transformer can translate XML to XML, XML to non-XML, non-XML to XML or non-XML to non-XML.

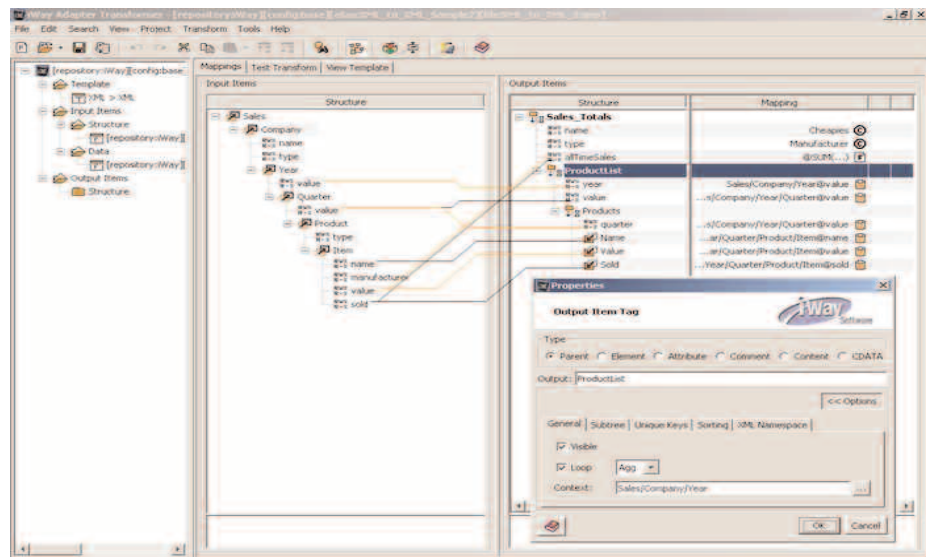
iWay Service Manager uses XML schemas or document type definitions (DTD) to define the structure of XML documents and dictionaries to define non-XML document structures. iWay Software provides prepackaged dictionaries for many common non-XML document formats and a dictionary builder tool for defining non-standard document structures.

Supported document formats include:

- Comma-delimited files
- Comma-separated values
- EDI X12
- EDIFACT
- Fixed width
- HIPAA
- HL7
- ATA
- ISO 8583
- SWIFT
- XML

The transformer works seamlessly with schemas created using Application Explorer, so developers can easily translate data that comes from over 300 applications, databases, legacy systems, and more into a common business definition – without writing a single line of code.

iWay Transformer provides any to any document type transformation with sophisticated function and document structure capabilities.



iWay Transformer allows much more than basic input-to-output document mapping. It includes more than 200 prepackaged functions for string manipulation, dates, mathematical operations, and more, and users can extend it with their Java and C libraries with minimal effort. It also handles nuances such as repeat sections, namespaces, replacement codes, and much more.

### Service Execution: Service Provisioning and Event Handling

The iWay Service Manager runtime engine – the deployment platform for iWay Business Services created in iWay Service Designer – is an event-driven, enterprise-class integration server. Events, including service request events, trigger deployed services. Upon receipt of an event message, iWay Service Manager moves it through a messaging pipeline – a series of processing steps and user exits – that enables Service Manager to process the events appropriately while enabling custom processing, extensions, and changes to the operating environment.

### Communications Interoperability

iWay Service Manager users associate services with specific event listeners. This encourages the creation of a loosely coupled integration architecture by allowing users to call services through a wide variety of standards-based and proprietary communication protocols. iWay services and events work with listeners based on:

- ebXML message service
- EDIINT (AS1, AS2, AS3)
- File structures
- FTP
- IMAP
- HTTP
- JMS
- MSMQ
- Oracle AQ
- POP3
- SOAP
- Sonic MQ
- SMTP
- TCP
- TIBCO Rendezvous
- WebSphere MQ
- And more

## Intelligent Routing

Routing rules govern every step of the message lifecycle, for both XML and non-XML messages. iWay Service Manager supports:

- **Fixed routing**, which simply allows the next process step to occur
- **Content-based routing**, which routes messages based on element values within a document and other decision criteria
- **Environment-based routing**, which routes messages based on technical context values such as IP address and sender ID
- **Function-based routing**, which routes messages based on special iWay functions, such as LDAP lookup

## Security

iWay Service Manager supports all security requirements for all of its implemented communications protocols. The security implementation isn't tightly bound to the protocol, which means, for example, that S/MIME functionality added for AS2 is available for FTP and other applicable protocols. Key security support includes decryption of incoming messages and encryption of outgoing messages, digital certificates, digital signatures, and keystores. All aspects of iWay Service Manager security can be extended, allowing for seamless integration of non-standard security algorithms.

## Enterprise Directory Interoperability

For authentication and identity management, iWay Service Manager supports LDAP and Active Directory, enabling process flows and run-time interactions to integrate information in enterprise directories. Additionally, iWay Service Manager can proactively listen for changes in directories and propagate these events to IT systems.

## Service Monitoring and Governance

Traditional IT environments differ from SOA implementations because there is no longer a one-to-one correlation between business processes and their supporting infrastructure. Governing SOA's loosely coupled distributed services environment requires specialized, always on, monitoring tools that do not impact performance. iWay Service Manager incorporates robust monitoring and governance tools, enabling better organizational alignment and improved IT operations productivity. Without the repository for and operational insight into deployed business services, an SOA cannot scale to meet the needs of a mature enterprise.

**Service Monitoring** – iWay Service Monitor handles the operational side of SOA, allowing organizations to effectively govern, manage, monitor, and secure the business services. As SOAs expand, it is critical to scale the infrastructure without increasing headcount. For all services deployed to iWay Service Manager, this solution enables:

- Process visibility and auditability
- Service identification and management interdependencies, both upstream (consumers) and downstream (producers)
- Business process visibility – manage business processes as a unit, track service-level agreements relative to the whole process, not just on a service-by-service basis

- Run-time governance of the services infrastructure – make sure that what’s in production is what should be, and stays that way
- Setting and enforcing business service-level agreements (SLA)
- Rogue-services elimination through automated policy inheritance
- Synchronous and asynchronous message flow support
- Business performance tracking for indicators to monitor the health and success of the SOA
- Enterprise-class performance and scalability

**Enforcement of Service-Level Agreements and Policies** – Policies are set with an interactive policy-authoring tool, which allows users to define rules based on SLA metrics, key business performance indicators, and metadata about the messages passing through the SOA. Policies are set for any iWay Business Service and are granular enough to apply to individual services in explicit “contexts” – so it’s not an “all or nothing” application of SLA.

When policies and business services are loosely coupled, governance changes remain isolated from service functionality. This also allows business units to set individual SLAs based upon any business context (customer, region, customer-class, process usage, etc.) and permits services to have multiple policies that are based on the different business contexts in which they are used. They can be attributable to business usage scenarios, allowing you to report on and manage service usage levels by key business criteria. For example, administrators are no longer bound by average response time of a particular service and can instead analyze performance results based upon the process consuming that service (e.g., order entry versus inventory management) or even by the individual using the service (e.g., silver customer versus platinum customer).

### **Service Discovery and Identification**

iWay Service Monitor answers critical operational questions regarding business services deployed in Service Manager, drastically reducing the time it takes to detect the root cause of business and technical issues in the SOA. This helps business constituents understand the value of the SOA and the service levels being provided. iWay Service Monitor allows for discovery of:

- Services currently in production
- Service consumers and usage patterns
- Service performance metrics
- SLA failures occurring in message flows
- Specific systems that have consumed services, ensuring direct accountability of the infrastructure

### Service Logging and Auditability

Events and service interactions may be written to an audit log. Administrators may configure the audit log to keep specific transactions, no transactions, or all transactions, and may also tailor what portion of each transaction should be kept. Custom-written routines may be substituted for iWay prepackaged log writers if desired for Sarbanes-Oxley compliance or to meet other governance needs. In a B2B environment, users can also view transactions as complete asynchronous conversation sets. The logging console allows users to provide additional comments and insight into transactions, which is helpful for complying with laws like Sarbanes Oxley.

### A Complete SOA and Web Services Solution

While iWay Service Manager is a full-featured Web services platform, its strength lies in its interoperability with non-Web services architectures. Business services created with this technology can quickly be deployed as SOAP-based Web services through JCA on J2EE Application Platform Suites, through plug-ins to major software vendors' proprietary platforms, as well as through 26 other supported B2B protocols. Service Manager is an enterprise-class server that runs on all major platforms, including Windows, major Unix flavors, mainframe z/OS, and the IBM iSeries.

To achieve the maximum potential of your existing systems while interacting with some of the best technology in the business, use iWay Service Manager as your enterprise ESB.

### For More Information

To see how we can help you succeed, visit us at [www.iwaysoftware.com](http://www.iwaysoftware.com), e-mail us at [info@iwaysoftware.com](mailto:info@iwaysoftware.com), or in the U.S. and Canada, call toll-free (866) 297-4929.



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