

Fiorano Enterprise Service Bus™ 3.7

Release Notes



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Fiorano Software, Inc., 718, University Avenue, Suite 212, Los Gatos, California 95032 U.S.A.

Tel 1.408.354.3210

e-mail: info@fiorano.com

FioranoESB 3.7 Release Notes

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FioranoESB 3.7 release is primarily a patch release with new set of Business Services and Event Processes. Additionally, enhancements have also been made to certain business services.

New Features

WorkList Service

The enhanced WorkList service will now allow enterprises to define "Manual Intervention" based business processes quickly and define rules to perform time-based or role-based escalation of specific tasks. The WorkList service also comes with a Web-based front end to allow users to look at their specific set of tasks and also provides Administrators with an option to look at the activities and escalate or re-assign them.

The WorkList service provides for

- Associating resources (user(s)/group(s)) to each WorkList service in the flow.
- Re-assigning/escalating/updating/deleting documents by manual intervention using a WebClient interface.
- Escalating tasks manually or based on rules to a user/group (Vertical or Horizontal) within a given hierarchy.
- Web-based front end with support for auto-generated forms. For instance, if resource "r1" logs in via a WebPage he should be able to see all the tasks assigned to him that he can manually "accept/reject or assign to another resource or escalate".

Aggregator Service

Data Aggregation is a commonly used integration design pattern. With the Aggregator service, N types of disparate XML data from various sources can now be aggregated to produce a single document using the Aggregator service. The Service can be used to aggregate business documents based on various completeness conditions and Correlation IDs. The various completeness conditions supported by the Aggregator service are Timeout, Timeout with Override, Wait For 'N' Messages, Dynamic Number of Messages, and FirstBet. All these messages can also be aggregated based on Correlation Identifier that can be used to uniquely identify parts of the message.

XML Splitter Service

The XML Splitter service provides implementation for XML Data Splitting, another powerful and popular design pattern. Documents passing through an integration solution typically consist of aggregation that contains multiple smaller documents. XMLSplitter service can be used to create N smaller documents of a larger document using XPATH.

ANT-based Scripts

ANT-based scripts now allow developers to build services and register them with the Enterprise Service Bus using any IDE. These scripts can be executed from command-line or within any Java IDE. Fiorano ESB 3.7 comes bundled with ANT scripts for the following functions:

- Register or Deploy Service
- Re-deploy Service
- Upgrade Service
- Unregister Service
- Compile Event Process
- Launch Event Process
- Synchronize Event Process

NT Service

All Fiorano ESB Servers (Enterprise Server, FioranoMQ, and Peer Server) and Event Processes can now be launched as NT Service. The servers and Event Processes need to be restarted after restarting the machines.

New Event Processes

Fiorano ESB 3.7 introduces the following new Event Processes that bring out the power of ESB for handling transactions, Web-based interactions, B2B communications and more.

OrderEntry

This Event Process demonstrates how web-based Client (JSP, ASP, Applets) can participate in the ESB processes by using a well-know business application (Order Entry system).

Supplier Integration System

This Event Process demonstrates (via multiple sub-flows) how an enterprise can integrate with suppliers using distinct protocols and data formats. This Event Process also illustrates how Fiorano ESB can be scaled both horizontally and vertically to meet the enterprise performance and scalability demands.

Compensation Transaction

Fiorano ESB's comprehensive support for long running transactions across services is illustrated in this sample. This sample also illustrates how Transaction boundaries can be drawn across services within an Event Process to recover long running transactions.

B2B Integration

This sample Event Process illustrates an end-to-end B2B Integration between an enterprise and its vendors. The Event Process illustrates how ESB can tunnel across firewalls and seamlessly handle disparate data formats and protocols.

Customer Support using WorkList

This Event Process illustrates how customer support can be effectively handled using WorkList in the ESB. In this sample Event Process, all incoming support issues can be tracked and escalated. Additionally, scheduled reports can be generated in this sample.

Other Enhancements

The following services have been enhanced with additional features and bug fixes

HTTPReceive Adapter

- **Support for defining XSD to validate input and output streams** Users can now specify data transformation for both request and response of all HTTP data sent to the HTTPReceive Adapter
- **Support for Resource Handler** Users can now specify dependencies (images and other resources) for the hosted web pages.
- **Expose Applications as WebService with DOC_LITERAL bindings** In addition to exposing Event Processes as RPC style Binding WebServices, a new option to choose DOC_LITERAL binding is also supported.

HTTP GET/POST Adapters

Data formats (XML) for the input and output ports are now exposed as port properties, thus, making it mandatory to specify the data formats manually for these services.

WebServiceConsumer

Support for DOC_Literals has been enhanced and support for invoking WebServices that use the following has been added:

- **SOAP Headers** WebServiceConsumer can invoke services that need specific values to be specified as part of their headers
- **MIME Attachments** WebServiceConsumer can invoke WebServices and retrieve responses with attachments

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- **WS Addressing** WebServiceConsumer can invoke WebServices that use WS Addressing semantics.

Additionally, WebServiceConsumer now provides for testing the configurations within the Custom Property Sheet.

MSMQ Adapters

Microsoft Message Queuing Adapters have been enhanced to support HTTP/HTTPS as the underlying transport protocol to connect to the MSMQ Server.

SAP Adapter

Enhanced ASAP BA2.1 Adapter that allows multiple instances of the Adapter within the same container.

FioranoESB Version 3.6 - build # 3002

FioranoESB 3.6 offers a range of significant new features and enhancements over its predecessor. The following sections contain details of the new features and enhancements incorporated in this build.

New Features

FioranoESB 3.6 comes with the following new features:

SubFlows

Event Processes can now be made a part of any other Event Process by collapsing them as a service and identifying the set of input and output ports of the Event Process. SubFlow allows a business analyst to visually represent complex business process as a higher level building blocks that are connected together. SubFlow supports any level of nesting (implicitly handling recursion) of Business processes.

Configuration Management via Profile Utility

FioranoESB 3.6 provides for advanced configuration management via the support for importing and exporting service instance and application profiles. Most enterprises have various stages namely Development, Staging, Testing, Deployment and so on and the configuration for services and applications need to be modified as the applications are moved from one stage to another. Profile Utility allows the configuration properties of applications and service instances to be stored for each stage so that moving from one stage to another becomes seamless. Each instance of a service as well as an application can have multiple profiles that represent the configuration of the environment variables (Peer Server Name, Database URL) so that System Administrator (or IT personnel) can simply import appropriate configuration profiles without having to reset these environment variables and thereby avoiding any manual errors.

File Schema Editor - XML, DTD and XSD schema

FSE now supports creation of file schema based on either XML, XSD or DTD formats. For instance, if the expected output format for a delimited text, csv, or any other ASCII file is defined in XML format then this expected XML output format can be used to auto-generate the schema. This allows auto configuration of schemas for files instead of having to manually create schemas. Support for testing the defined schema is also provided as a part of the schema editor.

WebService Consumer

WebService Consumer supports invocation of any WS that conforms to WS-I Basic Profile 1.0 interoperability guidelines. Enhanced WebService Consumer service

- Provides complete Dynamic Invocation Interface (DII) for invoking J2EE as well as .NET hosted Web Services.
- Also can be used to invoke rpc-encoded, rpc-literal, doc-literal and wrapped doc-literal web services.
- Invocation mechanism is compliant to SOAP version 1.1.

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- Provides UDDI Registry Browser that enables users to search the UDDI Registry (web-based distributed directory that enables businesses to list themselves on the Internet) and invoke the required WebService or Business.

Exposing Business Processes as WebServices

Business Processes can now be exposed as WebServices so that any external SOAP Client can initiate the business process without having any Fiorano specific installation. This functionality becomes useful for B2B integration.

Other Enhancements

All the Netbeans based tools (FSE and FSDS) now support auto-update. This will allow users to update the tools for bug fixes by downloading the update patches from the Fiorano website.