Message Mediation

Message mediation is a fundamental part of any ESB. The WSO2 ESB achieves message mediation through its mediators.

Built-in mediator capabilities of the ESB provide functionality to match incompatible protocols, data formats and interaction patterns across different resources. Data can be split, cloned, aggregated and enriched, allowing ESB to match the different capabilities of services. XQuery and XSLT allow rich transformations on the messages. Rule-based message mediation allows users to cope with the uncertainty of business logic. Content-based routing using XPath filtering is supported in different flavors, allowing users to get the most convenient configuration experience. Built-in capability to handle transactions allows message mediation to be done transactionally inside the ESB. With the eventing capabilities of ESB, EDA based components can be easily interconnected. With features like throttling and caching integrated in to the message mediation, powerful interconnections can be made, allowing ESB to be used in the front-end of an organization’s SOA infrastructure.

Mediators

A mediator is a full-powered processing unit in the ESB. In run-time it has access to all parts of the ESB along with the current message. Usually, a mediator is configured using XML. Different mediators have their own XML configurations.

At the run-time, a message is injected in to the mediator with the ESB run-time information. Then this mediator can do virtually anything with the message. A user can write a mediator and put it into the ESB. This custom mediator and any other built-in mediator will be exactly the same as the API and the privileges (Refer to more information in Writing a WSO2 ESB Mediator).

Refer to Mediators.

Mediation Sequence

A mediation sequence, commonly called a "sequence", is a list of mediators. That means, it can hold other mediators and execute them. It is part of the ESB’s core and message mediation cannot live without this mediator. When a message is delivered to a sequence, it sends the message through all its child mediators.

Read more in Mediation Sequences.

The Process of Message Mediation
In case an error occurs in the main sequence while processing, the message goes to the fault sequence.
For detailed information about mediators, refer to the following pages:

- **Mediators** — General information about WSO2 ESB mediators.
- **Mediation Sequences** — General information about Mediation Sequences in WSO2 ESB.
- **Adding a Mediation Sequence** — Instructions on how to add a mediation sequence in the ESB Management Console.
- **Editing a Mediation Sequence** — Instructions on how to edit a mediation sequence in ESB Management Console.
- **Deleting a Sequence** — Instructions on how to delete a mediation sequence in the ESB Management Console.
- **Adding a Mediator to a Sequence** — Instructions on how to add a mediator to a sequence in the ESB Management Console.
- **Editing a Mediator** — Instructions on how to edit a mediator in the ESB Management Console.
- **Adding a Child to Mediator** — Instructions on how to add a child to a mediator in the ESB Management Console.
- **Deleting a Mediator** — Instructions on how to delete a mediator in the ESB Management Console.
- **Creating Custom Mediators** — General information about custom mediators creation.