ESAB implements iCore adapter technology with IBM Websphere

Background

To introduce service-oriented architecture (SOA) for enterprise agility, ESAB chose iCore Adapter in combination with IBM WebSphere. ESAB needed a flexible integration, internally as well as for the supply chain, with the central ERP system Movex and the local ERP systems Scala, including access to legacy applications in the local AS/400 and Unix environment. The requirements were more automation and less manual administration in the interaction with the existing central WebSphere Business Integrator Message Broker.

IBM Deliverables for the integration Solution

The integration solution comprises:

- Implementation of iCore iScala adapter (via iScala Connectivity and complementing access methods).
- Implementation of iCore Movex adapter (directly via the MI Interfaces, no MeC involved).
- Implementation of iCore File adapters towards AS/400, Windows and UNIX environments.
- MQ-server installation and configuration.
- Broker work (routing and new queues).
- Test of installations.
- Project management.
- Implementation of the following integration processes:
  - Direct Delivery scenario, including six messages (orders i/o, ordrsp i, desadv i/o, desnot o).
  - Implementation of Digitrade integration (web portal integration).
  - File communication.

The solution

The Integration Platform was a prerequisite to enable the Supply Chain project and to automate the Direct Delivery and the Replenishment process in Europe. The ERP Adapters from iCore was chosen to obtain a service-oriented architecture (SOA) for the ERP systems.

The iCore Adapter solution files as little data as possible to minimize the occurrence of isolated information islands and the risk of redundancy; the ERP systems works as masters in this case. The solution also allows a large number of local ERP adaptions, something that is most undesired to have in the central corporate Broker.

The solution contains:

- Several types of integration formats. For example, Movex MI Interfaces, XML (OAGIS), ODBC, files, EDIFACT and MQ.
- Fully automated transaction handling, with guaranteed delivery of transactions.
- Efficient systems administration, low cost of ownership.
- Scaling possibilities, easy to upgrade the solution with more servers and CPU's
- Communication via the internal LAN/WAN with IBM WebSphere MQ.

Results

- Better internal control of business processes between applications.
- Minimized manual administration.
- Automated order process for Direct Delivery, Replenishment and web portal integration.
- Fewer people involved in the order process.
- A template-based, more unified order process.
- Fewer warehouses.
- A consolidated view over the stocks in Europe.
- Stock replenishment is managed by each factory.
- A consolidated product structure.
- Fewer planners required.
- Integration Platform for other Pan European projects.

IBM infrastructure

The following IBM infrastructure is involved in the solution:

- WebSphere MQ Integrator Broker
- WebSphere InterChange Server
- WebSphere Data InterChange Server
- WebSphere MQ Workflow

Partner

IBM Global Services ITS, Göteborg