



Business Process Management for SEPA

SEPA competence

For years, Qualysoft focused in process oriented approaches. These approaches can be successfully adapted and used for state of the art payment systems.

The Payment Services Directive (PSD) provides the legal foundation for the creation of the Single Euro Payment Area (SEPA). The basic structure of SEPA allows highly automated payment process implementations in the EURO region by using Business Process Management techniques. The 5 elements of the holistic business process management cycle can be also successfully used for payment processes.

Business Process Management

The subsets of BPM are business process modeling, automation, monitoring, and optimisation. All areas are already supported by IT tools. The new claim, however, is the demand to service all the areas by only one software suite.

Business Process Modeling

The ISO-Committee published the world wide ISO20022 Standard for the Financial Supply Chain a time ago. The guidelines of SEPA are also based on this standard.

The standard includes the sequence of all messages between the involved parties (the message flows) and the content of the messages.

Additionally, the usage of XSD/XML technologies facilitate the implementation of end-to-end processes between the specific SEPA participants in detail.

SEPA Enterprise Application Integration

To automate all payment process, all systems involved have to be included in a single integrated enterprise architecture. This architecture uses ISO20022-based SEPA message formats to connect to the individual IT systems of both corporate and financial institutions. SEPA-compliant systems will be integrated as individual applications in the SEPA-based Enterprise Service Bus (ESB).

Qualysoft supports BPM-Suites of leading providers. SEPA solutions consist of individual systems which get integrated into one business process management suite by the realisation of adapters for the BPM Suite. Payment processes like SEPA Credit Transfer (SCT) and SEPA Direct Debit (SDD) will be managed according to rules defined in the BPM Suite.

SEPA Workflow Management

Organisations involved in complete payment processes automate these processes with minimum human interaction in Straight Trough Processing (STP).

The variety of alternatives of inserting the complex business logic into the BPM suites reduces the number of errors and exceptions in the process. Costs get cut by reducing manual editing and flexibility is addressed by implementing business logic in the BPM suite. But legal guidelines can be only kept in compliance with Payment Services Directive (PSD) if the BPM Suite executes the automated parts of the process within very low time frames.

For the small number of process instances that cannot be automated, the Workflow Engines of the BPM Suite will take over human interaction with the IT System. These Workflow Engines allow flexible and cost effective implementation of graphical user interfaces to support the human workflow. The shift of the business logic from the backend systems to the BPM suites will save the expensive additional time and costs.

SEPA Business Activity Monitoring

The payment process will be monitored and checked by a Business Activity Monitoring (BAM) module of the BPM Suite.

If incoming SEPA message sequences don't match the SEPA constrains of the European Payment Council or any bilateral constraint, then these transactions will be separately reported, or forwarded to a manual process.

In addition, the messages information is aggregated and used to feed the values of Key Performance Indicators (KPI). This tactical information is used within a wide range of subsequent processes:

- Management of system resources
- Displaying the stastistical information
- Calculation and Billing of services

WebMethods shows also an extended and very innovative solution to predict values and trends of the KPI values. It enhances the KPI monitoring through methods derived from the artificial intelligence field. This allows identification of potential problems like low performance payment routes. Such BPM Suite capabilities lead to a shift from the reactive problem solving to aproactive process management.

Business Rules

BPM and EAI solutions enable simple and fast communication by using the graphic process diagrams. There is a growing demand for controlling and using of business rules by the specialists on the IT systems directly, in order to prevent money laundering and support the fight against the terrorism. Business Rules Engines enable by their user-friendly user's interface the configuration of the business rules and their high efficient execution using Rete Algorithms. Analogous to the trends to standardise process modeling and automation, there will be specialised rules components in BPM based SEPA solutions in the near future.

