

The following are some of the key features of the OPX Workflow Engine

Process Modelling

Processes are fully modelled using the tools provided in the Corporate Modelling Six Sigma Station or Enterprise Improvement platforms. These include a graphical process painter for BPMN process definitions.

Process Model Analysis

The modelling tools provide the additional means of analysing processes for Six Sigma quality, analysing the costing of current and new processes and simulating the costs and resource requirements of those current and new processes.

Process Versioning

Supports process versioning and deployment of new versions of a process side-by-side with existing versions.

Workflow APIs

The Workflow Engine provides APIs written in .NET, through which the behaviour may be modified at run-time. In particular, integration with the modelling tools allows the use of Oban-based rules to extend the run-time behaviour. Examples of APIs include: start case, cancel case, check-out/in case, add attachment, case escalation.

State-Entity Machine

The Workflow Engine is based upon a state-entity machine and need not be

linked explicitly to a given database or application.

Parallel Processing

The state-entity based Workflow Engine allows an individual case to exist in multiple states simultaneously; a case may then be processed by more than one task in parallel. The state-entity machine also provides for locking and synchronisation of separate steps of a process. Similarly, cases may flow from one process to another, or may be in multiple different processes concurrently. This too is controlled through the state-entity machine and extended through Oban rules and/or .NET API calls.

Interoperation with External Systems

As the core of the Workflow Engine is based upon a state-entity machine that is stored in SQL-Server database tables with APIs written in .NET, it can interoperate with external systems such as a document storage and retrieval system through the supplied APIs (or custom-written code).

Case Tracking

Ability to identify and monitor individual live cases.

Case History

Ability to analyse and report on individual historical cases.

Business Activity Monitoring

The on-line and historical activity of the Workflow engine can be monitored using Business Objects Dashboard, or a custom solution utilising standard SQL views and queries.

Service Level Agreements

Service level agreements are modelled and deployed along-side process definitions; this provides a means of prioritizing cases. In addition, the Workflow engine can be monitored for compliance with these agreements.

Skills Profiling

The modelling tools provide the means to profile the skills appropriate to individual steps of a process; this data may be used in a deployed application to *route* work effectively to appropriate users and/or work-groups.

Alerts

Using a Business Objects Dashboard or a custom alert mechanism, appropriate individuals can be notified when cases or processes fail to comply with agreed service level criteria.

Scalability and Resilience

The Workflow engine maintains state in SQL-Server database tables to provide transactional safety, resilience and scalability.