SCORENGINE

SCORING ENGINE
AUTOMATIC DECISION RECOMMENDATION
TOOLS FOR STRATEGY MODELLING

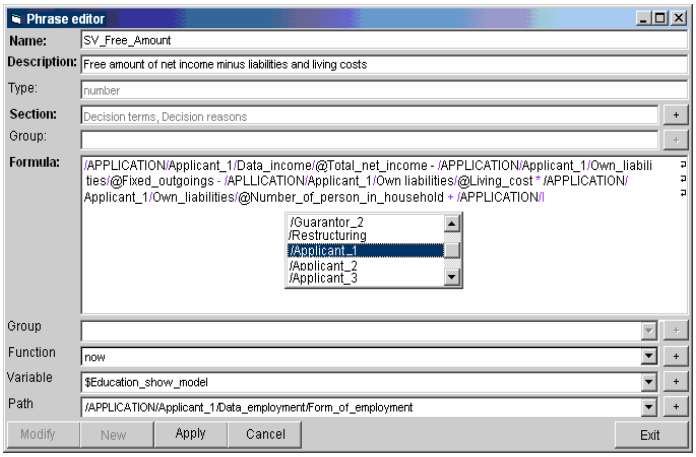
The ScorEngine (decision engine) by Bonair is a highly specialized, flexible application allowing to process vast array of forms using a user-defined algorithms. The key to flexibility is a departure from rigid document structure in favour of XSD-based document definition. The document processing algorithm definition, based on the document structure definition, may include scoring calculation, revision of document content based on defined rules and generation of automatic decision recommendation for forms being processed.

A major area of application of scoring engine is loan application processing. Through the application of flexible mechanisms for modelling of application processing algorithm it is possible to apply scoring engine to application/behavioral scoring both for individual and corporate customers to perform rating of any products (e.g. lending, insurance products, applications for the payment of damages or benefit etc.).

The scoring engine consists of two units:

- MSP (Models, Strategies, Procedures) – the editor used to define algorithm for the automatic generation of decision recommendation (defining component),
- ADK (Decision Automation) – execution unit, generating document recommendation based on the pre-defined algorithm (operational component).

Based on document structure, using an editor, the algorithm for automatic generation of decision recommendation is defined. The core element of algorithm is document scoring, whereas a supplementary element is decision tree (consecutive scoring steps, conditions examined: ratios, classifications, decisions about further steps and conditions examined).



ALGORITHM DEFINITION EDITOR allows to define the following algorithm constituents:

VARIABLES

Variables are defined as expressions, formulae calculated based on document features. The syntax correctness is monitored, document definition fields and insertable formula elements are prompted - menu selectable.

CLASSIFICATIONS

The classifications are used to divide document population into classes. The introduction of classification defines the underlying classes and criteria to be met by a certain document to belong to a certain class. A document that fails to meet class eligibility criteria, belongs to complementing class.

SCORING MODEL

Document score is calculated based on entered scoring cards and formula defining assignment of score points. For each document type it is possible to define various scoring models.

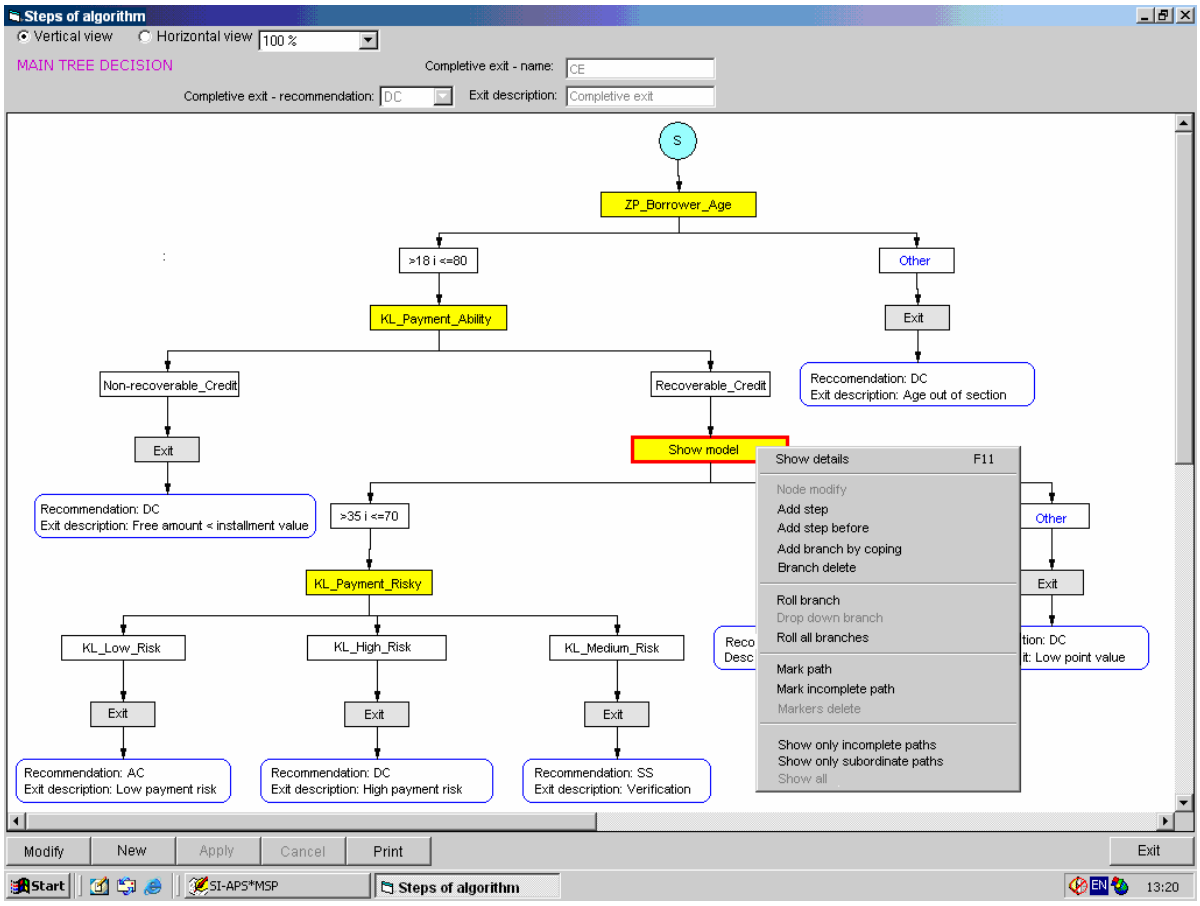
RECOMMENDATION GENERATION ALGORITHM

The recommendation generation algorithm is defined as a tree and consists of many nodes at which the following actions can be performed:

- condition examination (value of variable, affiliation to classification classes),
- scoring
- action execution,

and passing to consecutive nodes depending on the score achieved at a node. In the final node a recommendation is made.

ADK EXECUTIVE MODULE is an stand-alone, independent programme, designed for operation as separate server, handling scoring queries. It was developed using C++ and Visual Basic languages and is designed for operation in Windows NT/200x environment.



SYSTEM IMPLEMENTATION BENEFITS:

- ✓ flexibility in:
  - defining of scoring strategy and automated recommendation process,
  - import of XSD definitions,
  - compatibility with any third party scoring cards,
  - organizing either application scoring (on-line application processing) or behavioral scoring (batch processing of document categories for the overall population and examination of affiliation to defined customer categories),
  - can be used for consumer market products, SMEs and for rating of corporate customers.
- ✓ modern architecture – the separation of business logic from application code allows to define any operational functionality by the business user with the appropriate access rights to the system without assistance of IT department.
- ✓ openness to integration - communication with external environment using XML standard.
- ✓ reliability - the ScorEngine is field proven solution servicing number of financial institutions in application and behavioral scoring.
- ✓ reduction of time necessary to lunch new products into the market,
- ✓ fast credit decisions improves bank image and enlarge customer base.

The ScorEngine implementation has the direct impact on decision process cost reduction and tremendous reduction of credit risk by implementing homogenous credit criteria. As the result the overall increase in efficiency and competitiveness is achieved.

BONAIR
BUSINESS IT SOLUTIONS

Bonair S.A.
ul. Rzymowskiego 34; 02-697 Warsaw; Poland
tel. +48 (22) 549 65 50, fax +48 (22) 549 65 51
http://www.bonair.com.pl; info@bonair.com.pl