Viscovery SOMine | Workflow Automation Services

Automated update and application of predictive models at specified times

Main Functions and Features

General characteristics

■ The **Workflow Automation Services** constitute a tool package available to complement Viscovery SOMine modules. The package provides dedicated services for the automated execution of each of the six workflow types of Viscovery SOMine.

■ User interaction with the tool package is performed through the Viscovery SOMine interface. Scheduled services run on behalf of the user, but do not require the user to be logged in on the computer.

Available services

■ The **Explore Workflow Automation Service** is based on the **Visual Explorer** core module and automates the Preprocess Data workflow (creation of a Viscovery data mart from specified input data, using the defined preprocessing settings) as well as the Explore Data workflow (creation of a Viscovery SOM model from a specified data mart, using the defined workflow settings).

■ The **Classify Workflow Automation Service** is based on the **Cluster and Classify** extension module and automates the Create Classifier (creation of a classifier model from a specified data mart, using the defined workflow settings) as well as the Apply Classifier workflow (application of a classifier or a cluster model to a specified application data mart).

■ The **Predict Workflow Automation Service** is based on the **Predict and Score** extension module and automates the Create Predictor (creation of a prediction model from a specified data mart, using the workflow settings) as well as the Apply Predictor workflow (application of a prediction model to an application data mart, according to workflow settings).

Automated execution of workflows

■ Automated model creation and application "in the background" at scheduled times
■ Execution of workflows as "tasks" on behalf of the user without need for further supervision
■ Update of data marts and predictive models using new data from defined data sources
■ Application of classification or scoring models to relevant data and export of results to defined targets
■ Consistent synchronization of interdependent tasks during automatic execution

Scheduling of tasks

■ Task creation by dragging a completed workflow from the project pane to the workflow automation pane
■ Specification of input data source and output data target for each task
■ Single or periodic execution at scheduled times (monthly, weekly, daily, arbitrarily periodic)
■ Specification of the time of first and last execution
■ Definition of possible dependences among listed tasks (result of one task serves as input for other tasks)
■ "Start now" and "Cancel task" options for starting and stopping task processing immediately
■ Re-use or modification of completed tasks by dragging to the project pane as workflows

Presentation and reporting

■ Calendar display for daily, weekly or monthly overview of scheduled tasks
■ Display of dependences among tasks
■ Highlighting of task status (scheduled, currently active, completed, disabled, canceled, or failed)
■ Retrieval of reports of all workflow steps in completed tasks
■ Notification by email after task execution, including result status and report