# KNOWLEDGE BASE AND CMS INTEGRATION

Andrej Hazucha, Tomáš Klieger and Vojtěch Svátek

### OUR GOALS

- Record and process knowledge
- Manage huge number of reports referring to data mining sessions
- Interact with semantic knowledge sources

#### OUR APPROACH

We designed data mining web portal based on CMS (Joomla!) interacting with Ontopia Knowledge Suite together called SEWEBAR-CMS.

Analytical reports are created within CMS with possibilities of entering (semi-)auto generated structured data.

## LOAD LOCAL SOURCES

- Data mining results exported in PMML
- PMMLs are imported into CMS as XML based articles
- Picking relevant segments and transform them into HTML

### REMOTE SOURCES

Administrator defines:

Links to queriable resources

• Queries for these resources

• XSLT transformations from native form into HTML

### ANALYTICAL REPORT

- Analytical report is combination of free text and linked fragments
- Importing fragments is supported by UI

## ANALYTICAL REPORT

Source and Tranformation	
Is dynamic: 🔘 No 💽 Yes	
Source: Ontopia (no syntax)	
Query: SEWEBAR 1	
limit: 10 Query Parameters:	
XSLT: SEWEBAR raw rows	

#### STATUS

- native XML DB (Berkeley) and XQuery
- Ontopia Knowledge Suite with tolog queries
- SPARQL endpoints (proof of concept)