

Text-Content-Analysis

Text-Content-Analysis based on the Syntactic Correlations between Ontologies

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January 2008

Structure

- Description of Work
- Analysing Ontologies
- SLA-Framework
- Text-Content-Analysis
- Conclusion

Description of Work

- Exploration of syntactic correlations between several ontologies
- Therefore:
 - no development of new ontologies
 - development of overlapping understanding by analysing ontologies
- Determination of existing ontologies (field of research: mechanical engineering)

Description of Work

- new method of analysing ontologies



Text-Content-Analysis

- Text-Content-Analysis:
 - Analysis of several ontologies
 - Analysis of components of selected ontologies

Description of Work

- Text-Content-Analysis is embedded in a SLA-Framework
- SLA-Framework:
 - Negotiation of Service Level Agreements (SLAs)
 - Interaction with Service User by negotiation of the users requests
- Emphasis of service character by the SLA-Framework

Description of Work

- initial Organization of the workflow:
 - evaluating applicable ontologies
 - analysing of existing ontology-analyse methods
 - implementing of the needed syntax and a suitable SLA-Framework
 - exposing the syntactic correlations by using the SLA-Framework
 - modelling the Text-Content-Analysis based on the SLA-Framework
 - developing of the aspirated Text-Content-Analyse method

Analysing Ontologies

- What kind of ontologies are required?
Research field: Mechanical engineering
- Evaluation of adequate Ontologies:
 - supported specifications: RDF-(S), OWL
- Analysing methods:
 - Existing ontology-analysis will be considered
 - Integration of the Text-Content-Analysis

Analysing Ontologies


- Ontologies are needed for semantic knowledge and concepts:



Knowledge capture and dissemination

- Access to semantic knowledge by using ontologies

Analysing Ontologies

- analysing ontologies by exposing the syntactic correlations
- the research field of semantic web becomes interesting
 -  Which aspects of analysing content are adequate?
- analysing content by syntactic facts

Analysing Ontologies

- Economical use by the Text-Content-Analysis:
 - Users requests are considered (SLA-Framework)
 - New kind of understanding
 - Understanding of SLAs (scope of the SLAs: mechanical engineering)

SLA-Framework

- Negotiation of the specific needs of the user
- Interaction between user and service by Negotiation
- SLA-Framework determines the Text-Content-Analysis:
 - Negotiation of the users request
 - Negotiated request is processed by the Text-Content-Analysis

SLA-Framework

- The SLA-Framework refers on a Syntax
- The negotiation of the users requests is based on the Syntax
- the syntax describes the analysed structures

SLA-Framework

➤ Aspects of the SLA-Framework:

SLA Template	defines a template for a SLA Document
SLA Negotiator	negotiation between user and service
SLA Document	contains information about SLA
SLA Repository	contains SLA Documents
SLA Reference	identifies a particular SLA Document
SLA Status	information from the SLA Monitor
SLA Monitor	reports values of a service
SLA Notification	information about SLA violations

SLA-Framework

- Development of components for the SLA Framework
- Interaction of the components
- Use of the Text-Content-Analysis by use of the SLA-Framework



Negotiation between user and underlying method of syntactic correlations

SLA-Framework

➤ Three main tasks :

- **Analysing ontologies:**

evaluating the ontologies; analysis of the syntactic correlations between ontologies and concepts; development of a superior syntax;

- **SLA-Framework:**

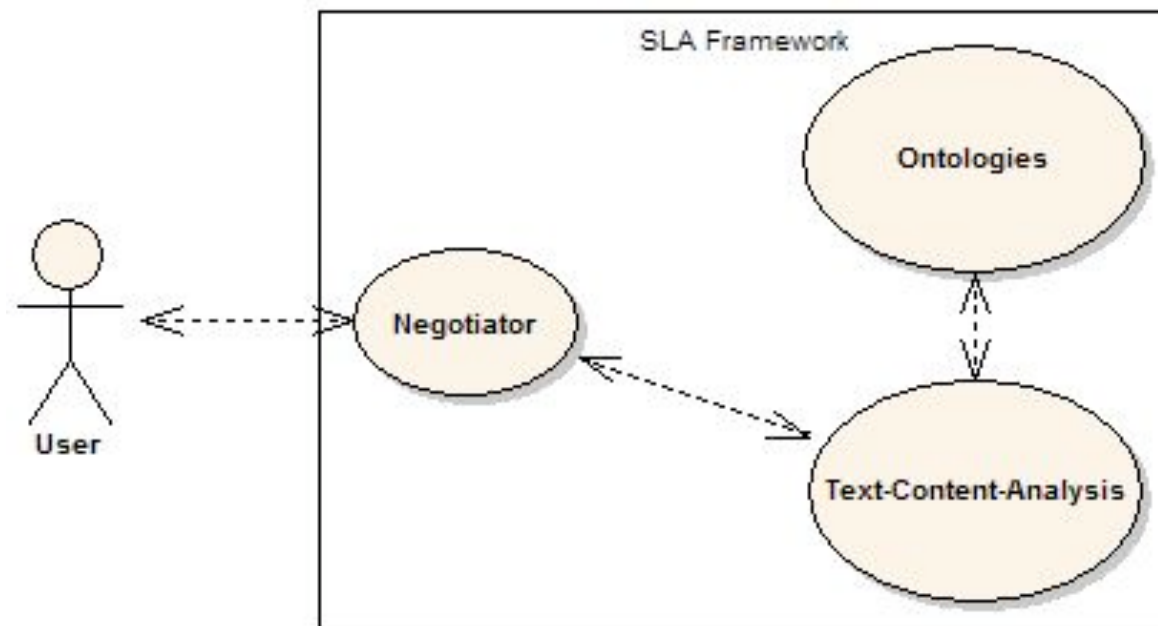
development of the SLA-Framework; negotiation of the requirements of the users and the objective facts of the service;

- **Text-Content-Analysis:**

implementation of the Text-Content-Analysis;

SLA-Framework

- How does the SLA-Framework influence the Text-Content-Analysis?



Text-Content-Analysis

- Analysing of ontologies, deploying a syntax and development of the SLA-Framework



Text-Content-Analysis

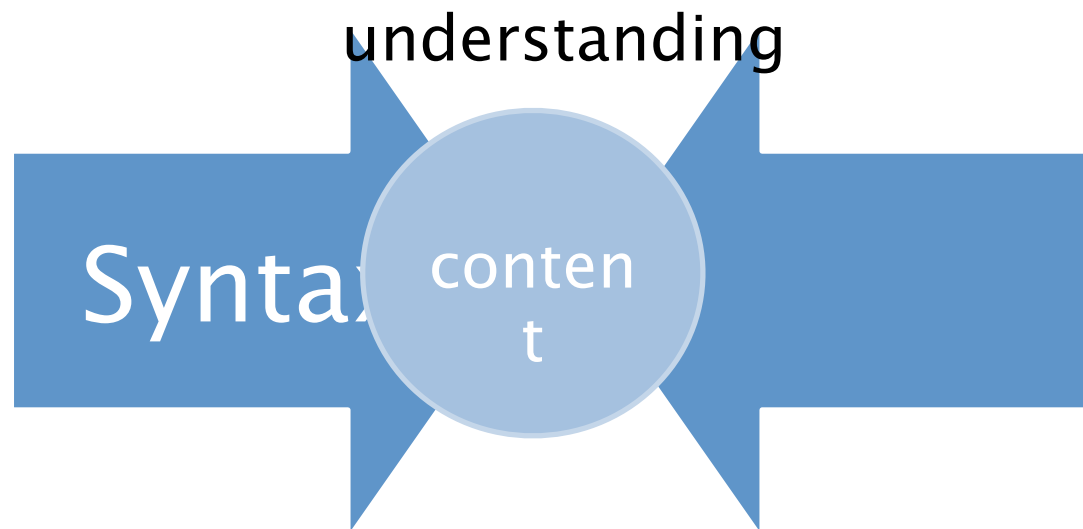
- Understanding of Service Level Agreements for the use of ontologies

Text-Content-Analysis

- Analysis refers to:
 - syntactic correlations of the ontologies
 - SLA-Framework
- Developed software is used as an intelligent service
- Service aspect becomes a main feature of the whole work
- Service aspect: Dynamically use of the Text-

Text-Content-Analysis


Understanding: Syntax and semantic is needed



Text-Content-Analysis

- Syntax and semantics:
 - Syntactic correlations are analysed
 - Semantics are considered
- Semantics: important to understand content
- But: main Focus of Text-Content-

Text-Content-Analysis

- Focus of the work: textual understanding (Text-Content-Analysis)
- Textual understanding by analysing syntactic correlations between ontologies
- Ontologies: RDF and OWL
 -  wide range of ontologies

Conclusion

- High flexibility: profitable for the service user
- Quality of the service: negotiation of users requests
(interaction between service user and service)
- Development of adequate formalisms and syntax

**Thanks for your
interest!**