PANACEA

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EAMT
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PANACEA's objective is to join together a number of advanced interoperable tools to build a factory of Language Resources
A production line that automates the stages involved in the acquisition, production, updating and maintenance of the LR required by MT and other Language Technologies.
Cost and time reduction by automation is the only way to ensure the continuous supply of LR’s that can guarantee a LT industry covering all languages, all domains, for current and future needs, and in the time required by the market.
The factory is build as a Web Service-based platform for easy integration of the latest technological components for:

- Monolingual and Parallel Text Acquisition and Pre-processing
- Sentential and sub-sentential alignment
- Bilingual Dictionary and Transfer Grammar production
- Lexical Information Acquisition for rich information dictionary production.
1. The platform, as a virtual, distributed, production line where different interoperable components can be chained in particular workflows to produce different types of LR’s, for different languages.

- Interoperability space
- A dedicated Panacea Registry, for the location, searching and documentation of Panacea components.
- Dedicated Panacea workflow editor for defining different production chains.
Project results (2/3)

2. The automatic acquisition and production components:

- Corpus Acquisition Component
- Corpus clean-up and Normalization Component
- Text Processing Components for sentence splitting, PoS Tagging, lemmatization, chunking and NER
- Sentential and subsentential aligners
- Bilingual dictionary extractor
- Transfer grammar extractor
- Lexical information Induction component
- Lexical classifiers
- Dictionary merger
Project results (3/3)

3. LR’s used as test and proof of the proper functioning of the factory.

- Parallel texts, cleaned and prepared for training-building translational models.
- Large monolingual corpus, PoS tagged and lemmatized for training and modelling language data,
- Monolingual lexica with morpho-syntactic, syntactic and lexical-class semantic information
- Bilingual dictionary and transfer grammar
Evaluation

PANACEA’s contribution & impact will be demonstrated with a significant time and cost reduction in producing LR’s. A real life use case will be used to measure the achievements.
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Summary

PANACEA goal is to build a Language Resource factory that will ensure the supply that Language Technology industry needs to break through problems such as Machine Translation systems covering all languages, all domains, for current and future needs, and in the time required by the market.
Keep informed at

www.panacea-lr.eu

Thanks!