



EU-BRIDGE Partners

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Service Architecture

Description and Exploitable Knowledge

The Service Architecture is the platform that abstracts the integration of client applications and the transcription/translation service providers. Based on a lightweight library, the Service Architecture lets application developers easily create complex transcription and translation workflows without knowing anything of the underlying transcription and translation engines.

The Service Architecture decouples clients and service providers by providing a simple, XML based protocol and a reference implementation library, available for the major platforms, to connect both end-user application and service engines to it.

Creating transcription and translation workflows requires the audio to be processed in specific sequence by multiple engines. E.g., to get translated and punctuated text in Italian out of an English speech one needs to invoke the following engines:

- English speech to English text transcription engine;
- English phrase segmentation engine;
- English to Italian translation engine;
- Italian punctuation engine.

The Service Architecture simplifies the creation of this workflow by providing automatic workflow creation given the input and output language pairs (called fingerprints).

The Service Architecture provides APIs for both, batch and real-time processing, supporting all of the transcription and translation needs. To simplify the batch processes integration, it also provides a set of web based REST APIs.

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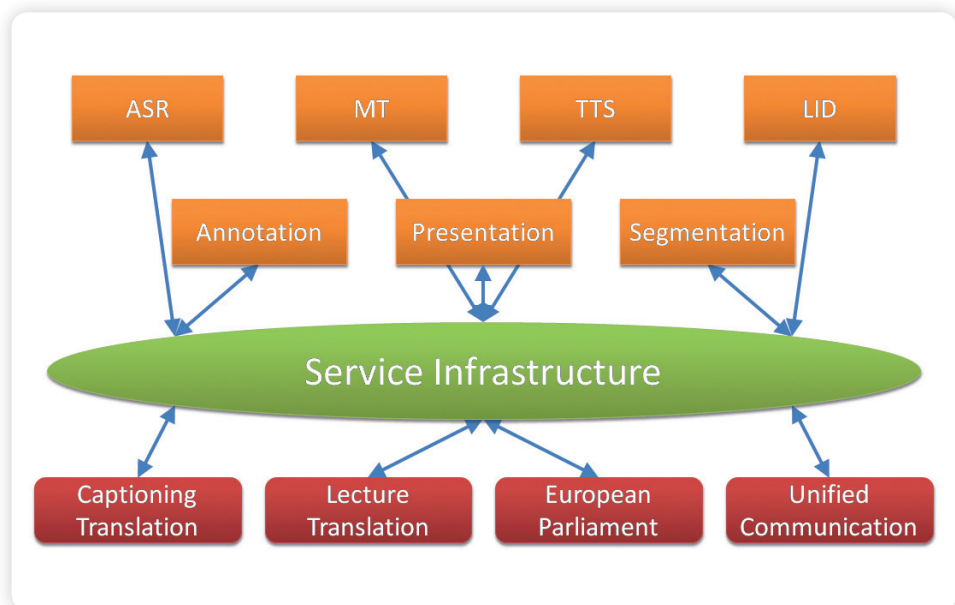
EU-BRIDGE - the Project

EU-BRIDGE is a European Integrated Project that aims at developing automatic transcription and translation technology that will permit the development of innovative multimedia captioning and translation services of audio-visual documents between European and non-European languages.

Infrastructure

The Service Architecture is a centralized service hosted at Karlsruhe Institute of Technology and PerVoice. It is composed of two major components: the Service Mediator, that handles all of clients and services connection, and the REST API module.

The Service Architecture has been designed to provide multiple concurrent transcription and translation workflows, by invoking the correct sequence of required service provider engines (workers).



Service Infrastructure

Application Sectors

Transcription services, Translation services

Technical Requirements

Fast Internet Connection

Terms of Availability

Costs and terms are available from PerVoice and KIT upon request.