A Web Service Interface for the Dutch Parser Alpino

Erik Tjong Kim Sang University of Groningen

20 January 2012

TTNWW project (2010-2012)

Title: LST Tools for Dutch as Webservices in a Workflow

Goal: integration of existing Dutch language and speech technology

Framework: CLARIN: make resources and technology available for researchers in human and social sciences

Participants: Aletta, Antwerp, Ghent, Groningen, Huygens, INL, KADOC, KDC, Leuven, Meertens, Radboud, Tilburg, Twente and Iltrecht

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Groningen & TTNWW

Focus for Groningen: Alpino parser

Method: build web service interface for Alpino

Note: this is the second of four TTNWW project talks in this session

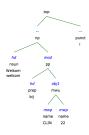
The other three talks deal with ISOcat, FOLIA and infrastructures for resource integration

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Alpino: syntactic analysis of Dutch



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Alpino Webdemo

ALPINO: AUTOMATIC SYNTACTIC ANALYSIS OF DUTCH

For more info on the Alpino Parser visit the Alpino ho



Sentences which take longer than 20 seconds to parse are ignored. The input is assumed to be a single sentence. Please type the sentence as you would do normally, with capitals at the beginning and for names etc. All sentences are logged and <u>visible</u> for others.

SVG is used to display the resulting dependency structures. Recent browsers support this, but in some cases you might need to download an

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http://www.let.rug.nl/vannoord/bin/alpino

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What is a web service?

A web service is a variant of a remote procedure call that:

- 1. accepts a processing request, usually from remote machine
- 2. processes the request
- 3. returns some data

The data exchanged between the service and the client is usually formatted in XML

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Steps taken in this project

- starting point: Alpino's server mode
- added server layer for processing more than one sentence in one run (Python script alpino)
- added server layer for tokenization and communication in XML format (Python script server.py)
- wrote command line text client (Python script client.py)
- working on XML input & output in Weblicht format (Python script parse)

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Organization of the software

The three servers are running at Calligo, the computer cloud of BiG-Grid/SARA in Amsterdam: $\verb|https://www.cloud.sara.nl/|$

The client software is presently only running at a machine in Groningen

Allowing another machine to access to the service requires a manual action from the admins at SARA, which takes several days

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Erik Tjong Kim Sang, University of Groningen A Web Service Interface for the Dutch Parser Alpino Demo	Erik Tjong Kim Sang, University of Groningen A Web Service Interface for the Dutch Parser Alpino What needs to be done next?
We present a demo of the current system: • input via the text client • input via the XML client	expand and validate XML input & output fix access for others: currently too limited embed in larger framework (Weblicht) And embed in other frameworks?
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Erik Tjong Kim Sang, University of Groningen Concluding remarks We are building a web service interface for Alpino The access to the interface is limited and should be improved The interface needs to be embedded in a larger framework CLIN 22, 20 January 2012	THE END