Introduction

GridLine is the expert on language and search technology for Dutch and other languages. One of our main products is Sonaling, a writing aid that helps users to write correct and understandable texts.

Architecture
Sonaling is built on a flexible, modular architecture with a text analysis pipeline at its core. This pipeline is composed of language analysis modules that we call our Language Server.

Interfaces
Sonaling’s user interfaces allow users to create, evaluate and improve their texts. They are integrated in Microsoft Office and many web based systems like CMS’s, CRM’s, etc.

Applications
We began development of Sonaling over five years ago with the Dutch version, called Klinkende Taal. The tool has proven very successful, as it is now used by around 50 organizations, including local and national governments, insurance companies and hospitals, etc. Currently, we are expanding the product to other languages, like English, German, Frisian and Afrikaans.

Language Server

The Language Server is GridLine’s toolbox of language technology components. It contains various types of modules for text analysis and enrichment.

Basic NLP modules
- Tokenizer
- Part of Speech Tagger
- Lemmatizer
- Compound splitter
- Word inflection

Correctness modules
- Spelling correction (in various languages)
- Compound word correction
- dt-error correction (typical Dutch verb errors)
- Determiner correction
- Correct use of capitals

Readability modules
- Difficult words and terminology
- Long sentences and paragraphs
- Complex sentences
- Passive sentences
- Nominalized verbs
- Missing headings
- ...

Applications

Klinkende Taal
The Dutch (and original) version of Sonaling is called Klinkende Taal. It automatically evaluates texts on readability and correctness. It marks texts for problems that it finds, giving the user an instant overview of the parts that need to be improved.

Based on the readability problems in the text, Klinkende Taal determines the language level of the text. This gives the author an indication on how understandable his text is and whether it is suited for his target audience.

Sonaling
GridLine recently developed an English version of Klinkende Taal. Because the architecture is fully modular and configurable, this was very easy to do.

All that was needed was to make English versions of the required Language Modules and translate the user interfaces to English.

Klinkende Taal Afrikaans
In collaboration with the North-west University in South Africa, GridLine developed an Afrikaans version of Sonaling. This version also contains language modules targeted at Dutch speakers who are learning Afrikaans.

Frysk Staveringshifker
This is an advanced spellchecker for the Fryslan language. In addition to regular spellchecking, it also checks for dialectal variants and other common incorrect spelling variants.

This application is part of the Fryslan Language Web (http://taalweb.fr/)

QuickScan
The QuickScan is used to evaluate a large number of texts at once with Sonaling. The result is a report with statistics on measured language levels and common problem types. This report shows an organization which texts need the most improvement.

The QuickScan can be used on different types of text collections like websites, documents, e-mails, etc.

Data Pipeline

Language modules are combined in a pipeline for document analysis. The output of the pipeline consists of text annotations and/or generated metadata, depending on the configuration of the analysis pipeline.

The data converters convert any input format to our standard document model, making the pipeline suitable for any user interface.