

# FriendlyReader API

This document describes the major functions in the FriendlyReader API. The document is targeted for Javascript but the information should be useful regardless of client.

For examples (convenience methods for Javascript), have a look at [http://www.ida.liu.se/projects/friendlyreader/openpdf\\_global.js](http://www.ida.liu.se/projects/friendlyreader/openpdf_global.js). This can also be linked and used straight up for Javascript-clients.

## Summarization

The summarization functionality of the server can be reached at:

<http://www.ida.liu.se/projects/friendlyreader/api/sum>

Accepts POST.

Possible parameters are described in the next section.

## Parameters

### **level** [0-100]

Used to determine the percentage of annotated sentences in a PDF. This parameter is not used when summarizing other document types, it's up to the client to display desired level of summary (except for PDF-files).

### **format** [text, html, pdf, auto]

The format of the request. Raw text, html-tagged text, PDF-file or auto. If this is not specified, auto is used. Auto tries to look at the header of the request made by the client to figure out what format should be used.

### **source** [bin, url, string]

The source of the request. BIN is used for binary data, for instance when the client sends a PDF-file. URL tells the server to fetch a page at the specified address (if paired with the auto format-parameter, the server does a GET and looks at the MIME-type of the retrieved page). String is handled as raw text.

### **annotate** [true, false]

When sending a pdf, if this is set to false, the pdf is not attached to

the response. Useful when sending large PDF's and you just want the text content.

## Response

A JSON-object is returned from the server, containing the following attributes:

### **sentences**

The extracted sentences as String array

### **rankOrdering**

Sentence indices sorted by their ranks after the summarization as int array.

Example: [0, 3, 1, 2, 5, 4] translates to a summary where the first sentence (the sentence with index 0) is the most important, followed by the fourth, then second, and so on.

A 50% summary can thus be created by extracting sentences 0, 3 and 1 from the six sentences long text. The indices corresponds to the array in the sentences-attribute of the JSON.

### **(pdf)**

For PDF-files, this attributes contain the raw bytes that makes up the annotated PDF-file. For documents other than PDF's, this attribute is undefined. This byte-array can for instance be opened in a new browser tab when used from a Javascript client.

### **keywords**

Keywords identified by the summarizer, as a JSON string array

## Javascript example:

```
// Summarizing text from a string
var url =
http://www.ida.liu.se/projects/friendlyreader/api/sum?format=text&source=string&level=10;
var request = new XMLHttpRequest();
request.open("POST", url, true);
request.send("This is a sentence. And another one. This text is
summarized to 10%");

// Summarizing a web page
```

```
var url =
http://www.ida.liu.se/projects/friendlyreader/api/sum?format=html&source=url&level=10;
var request = new XMLHttpRequest();
request.open("POST", url, true);
request.send("http://www.ida.liu.se/projects/friendlyreader");
```

## Speak

Located at:

<http://www.ida.liu.se/projects/friendlyreader/api/speak>

Accepts POST.

A text is sent to FriendlyReader as string and returned as a WAV, encoded in a byte[]. Automatic language identification is attempted.

One parameter is possible (not used however in the standard case), see Example.

### Example

```
// For TTS, the language of the text that is sent to the server is
automatically identified.
// If the ID fails, the language specified in the parameter is used
as fallback.
var url =
http://www.ida.liu.se/projects/friendlyreader/api/speak?lang=sv;
var request = new XMLHttpRequest();
request.open("POST", url, true);
request.send("En mening på svenska. ");
```

## Translate

Translate is located at

<http://www.ida.liu.se/projects/friendlyreader/api/translate>

No parameters are used.

Accepts POST.

A text is sent to FriendlyReader and returned as a text in Swedish. Source language is automatically identified.

### **Example:**

```
// For translation, source language is automatically identified,  
while target language at this point is hardcoded to swedish.  
var url =  
http://www.ida.liu.se/projects/friendlyreader/api/translate;  
var request = new XMLHttpRequest();  
request.open("POST", url, true);  
request.send("This is a sentence that will be translated to swedish."  
);
```

## **Contact**

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