



Tomasz Borowski  
programmer at Selleo  
t.borowski@selleo.com

# Generating beautiful PDF files

wkhtmltopdf and PDFKit in action



# What is the problem

Generating PDF files may be a problem in web applications:

- tool is not based on HTML tags
- tool does not interpret css definitions
- tool interpret only few css definitions
- output PDF document looks just awful
- ...
- tool is excellent but... it is not free :)

# Solution

## Metreno Business Consulting

A SaaS software product for tests generation, sales & management. The platform allows the client to efficiently generate, distribute and administer HRM-related tests and surveys to their corporate customers.

[view our work](#)

[contact us](#)

### Our Mission



Together with our customers, we create meaningful web applications to make a distinctive difference in the way people learn, work, do business and relax.



### Our favourite quotes



"We need a process that allows us to develop the 20 percent of the code that deliver 80 percent of the value."

- Mary & Tom Poppendieck in Lean Software Development

### Why Selleo?



Over the years, we have established a number of long-lasting partnerships with clients from Europe and America, serving them both on- and off-site, very often on multiple projects.



We have gained rich experience developing a wide variety of applications in diverse business domains.



Clients praise us for our readiness to meet challenges, adaptability and determination to solve their problems. They say we are friendly, open and loyal. Talk to them.



In time, we have managed to master a broad spectrum of skills to deliver a comprehensive set of services under one roof.



We go beyond solid engineering skills. We strengthen our clients with web business insights as well as creative design. Our experience has led us to believe technology and artwork are servants to our clients' business goals.



While delivering a number of nearshore / offshore projects, we have developed a sound, process-based approach to fit your software product as well as your project implementation strategy.

# Use wkhtmltopdf utility

# Why this tool

Several reasons to use wkhtmltopdf

- It is based on Webkit engine
- It interprets JavaScript, which may be used to deliver some content
- It has number of useful options for PDF generation process
- It outputs nice looking PDFs!
- ...
- It is free (under GNU General Public License v3)

# Simple Examples

wkhtmltopdf http://cnn.com cnn\_page.pdf

wkhtmltopdf http://en.wikipedia.org wiki\_page.pdf

The screenshot shows the CNN website homepage. At the top, there is a red navigation bar with the CNN logo and various menu items like Home, Video, World, U.S., Africa, Asia, Europe, Latin America, Middle East, Business, World Sport, Entertainment, Tech, Travel, and iReport. Below the navigation bar, there are several news stories. The main story is about a suicide bombing in Sweden, with a sub-headline 'Police: Sweden suicide bomb went off early'. Other stories include 'Oprah's Ultimate Australian Adventure' and 'IMPACT FOR THE WORLD'. There is also a section for 'TOP STORIES' with a list of recent news items. The page is dated December 13, 2010, and updated at 15:18 GMT (23:19 HKT).

The screenshot shows the Wikipedia homepage. At the top, there is a search bar and a 'Log in / create account' link. Below the search bar, there are several navigation links: Main Page, Discussion, Read, and View source. The main content area features a large image of a woman with the text 'Please read: A personal appeal from Wikimedia Executive' and a 'Read Now' button. Below this, there is a 'Welcome to Wikipedia' message, stating that it is the free encyclopedia that anyone can edit, with 3,500,863 articles in English. There are also several sections for 'Today's featured article' and 'In the news'. The 'Today's featured article' section features 'The Scout Association of Hong Kong' and the 'In the news' section features 'Two bombs explode in Stockholm, Sweden, killing the attacker and injuring two other people' and 'Chinese human rights activist Liu Xiaobo (pictured) is awarded the'.

# What If I need more

**wkhtmltopdf** allows you to generate pdf:

- from multiple resources
- with customized headers and footers (ex. with page numbers)
- with automatically generated table of contents
- in grayscale, economic way ready to print
- In custom size, zoom, orientation, with custom margins and...

**much more :)**



# Ruby on Rails usage

You can use **wkhtmltopdf** through **PDFKit** gem!

- customize default PDF settings in initializer
- use middleware to get PDF view of any page in application
- save PDF on server or render to browser

# Ruby on Rails usage: installation

PDFKit:

```
gem install pdfkit
```

wkhtmltopdf:

```
# download: http://code.google.com/p/wkhtmltopdf/downloads/list
```

```
xz -d wkhtmltopdf-xxx.tar.lzma
```

```
tar -xf wkhtmltopdf-xxx.tar
```

```
sudo mv wkhtmltopdf-xxx /usr/local/bin/wkhtmltopdf
```



# Ruby on Rails: usage

You can use **wkhtmltopdf** through **PDFKit** gem!

- customize default PDF settings in initializer
- use middleware to get PDF view of any page in application
- save PDF on server or render to browser

```
kit = PDFKit.new(html, :page_size => 'Letter')
```

```
pdf = kit.to_pdf # Get an inline PDF
```

```
file = kit.to_file('/path/to/pdf') # Save the PDF to a file
```

# Ruby on Rails: config

You can customize default settings of PDFKit

```
# config/initializers/pdfkit.rb
PDFKit.configure do |config|
  config.wkhtmltopdf = '/path/to/wkhtmltopdf'
  config.default_options = {
    :page_size => 'Legal',
    :print_media_type => true
  }
end
```

# Ruby on Rails: middleware

You can create PDF view of any page of your application.

It will be accessible by using .pdf format, ex. /path/to/index.pdf

All pages:

```
# in application.rb
```

```
require 'pdfkit'
```

```
config.middleware.use PDFKit::Middleware
```

# Ruby on Rails: middleware

Certain action example:

```
# in environment.rb
```

```
Mime::Type.register "application/pdf", :pdf
```

```
# in action
```

```
respond_to do |format|
```

```
  format.html # index.html.erb
```

```
  format.pdf { render :text =>  
PDFKit.new( post_url(@post) ).to_pdf }
```

```
end
```

# Sources

- wkhtmltopdf homepage  
<http://code.google.com/p/wkhtmltopdf/>
- wkhtmltopdf manual  
[http://madalgo.au.dk/~jakobt/wkhtmltopdf-0.10.0\\_beta4-doc.html](http://madalgo.au.dk/~jakobt/wkhtmltopdf-0.10.0_beta4-doc.html)
- PDFKit homepage  
<https://github.com/jdpace/PDFKit>