# Surpass Manual

Ana Nelson

March 20, 2009

# Contents

To compile this documentation requires  $\LaTeX$  X, Idiopidae, and my branch of webby, which is available from a bzr repository at .

This documentation refers to Surpass version 0.0.3.

### Chapter 1

## Installation and Hello World

### 1.1 Dependencies

Surpass only needs basic Ruby. It has been tested using Ruby 1.8.6 and JRuby 1.1.5.

For development, you will want to have access to something that can open Microsoft Excel files. This could be Microsoft Excel, Open Office, Google Docs or even a gmail account.

### 1.2 Gem Installation

sudo gem install surpass

### 1.3 Source Installation

bzr branch http://ananelson.com/code/surpass
sudo rake gem:install

### 1.4 Hello World

Let's do a minimal "Hello World" script. We'll need to take care of any imports, initialize a Workbook object, create a Worksheet within the workbook, then write some text. Here's how.

### 1.4.1 Surpass

```
require 'rubygems'
require 'surpass'

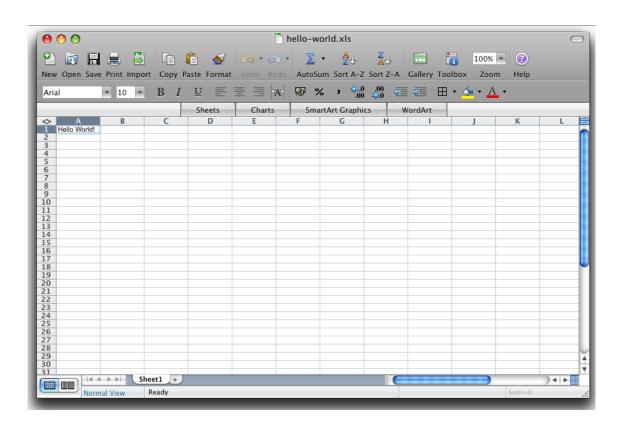
book = Workbook.new
sheet = book.add_sheet

sheet.write(0, 0, "Hello World!")

book.save("content/examples/hello-world.xls")
```

#### 1.4.2 Result

And, here's how it looks.



# Chapter 2

# Writing Data

### Chapter 3

# **Formatting**

### 3.1 Reference

There are some rake tasks included with Surpass which provide some useful reference data.

rake -T | grep excel
rake excel:colors # list all available colours

And since you are running these on a command line, you can save them or pipe them to other commands, as usual.

rake excel:colors | grep green
bright-green
dark-green
green
light-green

olive-green sea-green

### 3.2 Formatting

The StyleFormat class is a wrapper for the various types of formatting you can apply to a cell. StyleFormat has attributes:

- $\bullet$  number\_format\_string
- font
- alignment
- borders
- $\bullet$  pattern
- protection

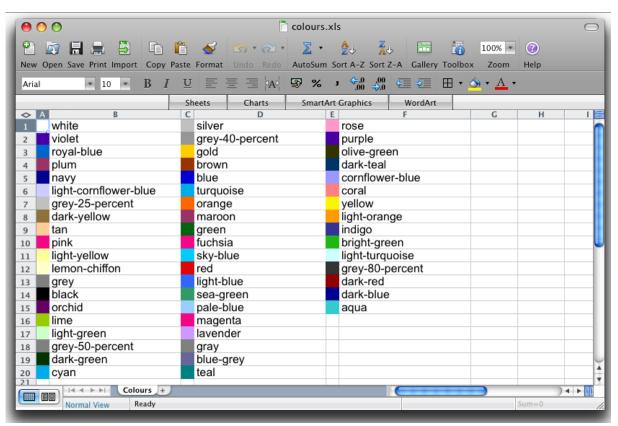
Each of these attributes has a corresponding class, and you can look in lib/formatting.rb for the source.

There are two basic ways to set formatting options. You can pass a hash with formatting options when you initialize a new StyleFormat instance, or you can set individual attributes of the formatting classes. You can combine both approaches. Both of these are demonstrated in the examples in this section.

### 3.2.1 Specifying Colours

Here is a list of available colours:

grey-25-percent orchid aqua black grey-40-percent pale-blue pink blue grey-50-percent blue-grey grey-80-percent plum bright-green indigo purple brown lavender red lemon-chiffon coral rose cornflower-blue light-blue royal-blue light-cornflower-blue cyan sea-green silver dark-blue light-green dark-green light-orange sky-blue dark-red light-turquoise tan light-yellow dark-teal teal dark-yellow lime turquoise fuchsia magenta violet gold maroon white gray yellow navy green olive-green grey orange



You can refer to any of these colours by name.

### 3.2.2 Border Formats

Here is a list of available border line types:

none thin medium dashed dotted

```
thick
double
hair
medium-dashed
thin-dash-dotted
medium-dash-dotted
thin-dash-dot-dotted
medium-dash-dot-dotted
medium-dash-dot-dotted
slanted-medium-dash-dotted
```

#### 3.2.3 Surpass

```
require 'rubygems'
   require 'surpass'
   book = Workbook.new(__FILE__.gsub(/rb$/, "xls"))
   sheet = book.add_sheet("Demo Worksheet") # You can name your worksheets.
    # Let's set up some formatting.
    # Remember to use Excel-style formatting directives, not sprintf.
   date_format = StyleFormat.new(:number_format_string => "DDDD DD MMM YYYY")
10
   fancy_format = StyleFormat.new(
12
      :font_name => 'Times New Roman',
13
      :font_colour => 'green',
      :font_italic => true
15
   )
16
17
   sheet.write(0, 0, "Hello World!", fancy_format)
   sheet.write(0, 1, Date.today, date_format)
19
20
    # You can also set up formatting by passing attributes directly to the constituents of StyleFormat
21
    # Font colours.
23
   Formatting::COLOURS.keys.each_with_index do |c, i|
24
     format = StyleFormat.new
     format.font.name = 'Verdana'
26
     format.font.color = c
     format.font.size = i + 5
28
     sheet.write(i, 5, c, format)
29
   end
30
31
    # Font underlining.
32
    [:none, :single, :single_accounting, :double, :double_accounting, nil, true, false].each_with_index
34
     format = StyleFormat.new
35
     format.font.underline = u
36
      sheet.write(i, 7, u.to_s, format)
37
   end
38
39
   {\it \# Font bold, italic, strike through, outline are simple booleans.}
40
    [:bold, :italic, :struck_out, :outline].each_with_index do |s, i|
      attribute = ("font_" + s.to_s).to_sym
42
      sheet.write(i, 8, s.to_s, StyleFormat.new(attribute => true))
43
44
   end
```

```
45
   # Cell alignment.
46
   sheet.write(15, 2, "top left", :text_align => 'top left',
     :border_top => 'pink',
48
      :border_left => 'pink'
49
   )
50
   sheet.write(15, 3, "top center", :text_align => 'top center')
sheet.write(15, 4, "top right", :text_align => 'top right')
51
52
   sheet.write(16, 2, "bottom left", :text_align => 'bottom left')
53
   sheet.write(16, 3, "bottom centre", :text_align => 'bottom centre')
   sheet.write(16, 4, "bottom right", :text_align => 'bottom right',
55
      :border_bottom => 'pink',
56
      :border_right => 'pink'
57
   )
59
60
    # Borders
61
   sheet.write(3, 1, "borders",
62
      :border_right => 'medium blue',
63
      :border_left => 'yellow', # thin by default
64
      :border_top => 'dotted purple',
65
      :border_bottom => 'dashed' # black by default
66
   )
67
68
    # Or the hash-free option.
69
    crazy_border_format = StyleFormat.new
    crazy_border_format.borders.all = 'slanted-medium-dash-dotted grey'
71
    crazy_border_format.pattern.fill = 'light-cornflower-blue'
72
    sheet.write(5, 1, "borders", crazy_border_format)
74
75
    sheet.write(7, 1, "fill", :fill_color => 'yellow')
76
77
   book.save
```

