Software Security Rapport

A (somewhat) complete reference

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1 Complete org-mode reference

Using org-mode for editing plain text files is a great experience. The structured editing of the document is very powerful.

> There does not seem to be a reference file out there with everything org-mode has to offer, so this is an attempt to make one.

Many of the below examples are taken from fniessen's refcard.

1.1 Typography

1.1.1 Bold and italic

Listing 1: bold and italic styles

```
1  /Emphasize/ (italics), *strongly* (bold), and */very strongly/* (bold
     italics).
```

Emphasize (italics), **strongly** (bold), and ***very strongly*** (bold italics).

1.1.2 Monospace, superscript and subscript

Listing 2: monospace, superscript and subscript styles

```
1  - monospaced typewriter font for ~inline code~
2  - monospaced typewriter font for =verbatim text=
3  - +deleted text+ (vs. _inserted text_)
4  - text with super^{script}, such as 2^{10}
5  - text with sub_{script}, such as H_{2}O
```

- monospaced typewriter font for `inline code`
- monospaced typewriter font for `verbatim text`
- ~~deleted text~~ (vs. inserted text)
- text with super^{script}, such as 2^{10}
- text with sub$_{script}$, such as H_2O

1.2 Lists

1.2.1 Unordered lists

Listing 3: Unordered lists

```
1  - one item
2  - two item
3    - sub item
4      - sub sub item
```

- one item
- two item
    - sub item
        * sub sub item

1.2.2 Ordered lists

Listing 4: Ordered lists

```
1  1. numbered
2  2. also
3  3. and another
4     1. sub item
5     2. sub item
```

1. numbered
2. also
3. and another
    a) sub item
    b) sub item

1.2.3 Checklists

Listing 5: Checklists

```
1  - [X] Checked.
2  - [-] Half-checked.
3  - [ ] Not checked.
4  - Normal list item.
```

- [X] Checked.
- [-] Half-checked.
- [ ] Not checked.
- Normal list item.

1.2.4 Definition lists

Listing 6: Definition lists

```
1  - First term to define ::
2      Definition of the first term. We add a few words to show the line
           wrapping,
3      to see what happens when you have long lines.
4
5  - Second term ::
6      Explication of the second term with *inline markup*.
7
8      In many paragraphs.
```

First term to define Definition of the first term. We add a few words to show the line wrapping, to see what happens when you have long lines.

Second term Explication of the second term with **inline markup**.

In many paragraphs.

1.3 Tables

1.3.1 Simple table with headers

Listing 7: A simple table

```
1  | Header 1 | Header 2 |
2  |----------+----------|
3  | Value    | not key  |
```

Header 1	Header 2
Value	not key

1.3.2 Naming your table

Listing 8: A table with a caption

```
1  #+CAPTION: Description of the table
2  | Header 1 | Header 2 |
3  |----------+----------|
4  | Value    | not key  |
```

Tabel 2: Description of the table

Header 1	Header 2
Value	not key

1.3.3 Column formatting

Columns are automatically aligned:

- Number-rich columns to the right, and
- String-rich columns to the left.

1. Table with aligned cells

   If you want to override the automatic alignment, use <r>, <c> or <l>.

Listing 9: A table with aligned columns

```
1  #+CAPTION: Table with aligned columns
2  |         <r> | <c>          | <l>          |
3  |           1 | 2            | 3            |
4  |       Right | Center       | Left         |
5  | xxxxxxxxxxx | xxxxxxxxxxxx | xxxxxxxxxxxx |
```

Tabel 3: Table with aligned columns

1	2	3
Right	Center	Left
xxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx

1.4 Links

See http://www.pirilampo.org (automatic!) and the Org mode Web site.

1.5 Citations

How about some SURF (2018) ?

1.6 Blocks

1.6.1 Quote

Sometimes you just need to quote someone.

> this is a quote from someone very wise

1.6.2 Code

Listing 10: Source code caption

```
1  #include <stdio.h>
2
3  int main() { (ref:sc)
4    // printf() displays the string inside quotation
5    printf("Hello, World!");
6    return 0;
7  }
```

in line *(sc)* there is some code.

1.6.3 Example

```
1  #include <stdio.h>
2
3  int main() {
4    // printf() displays the string inside quotation
5    printf("Hello, World!");
6    return 0;
7  }
```

1.6.4 ditaa

⚠️ ditaa integration does not work yet.

If you want to run `ditaa` in Emacs you will need to add it to `org-babel` and set the path to the `ditaa.jar` you will have to install.

**Listing 11:** Configure ditaa

```
1  (org-babel-do-load-languages
2   'org-babel-load-languages
3   '((ditaa . t)))
4
5  (setq org-ditaa-jar-path "/usr/share/ditaa/ditaa.jar")
```

You can then use your best ascii art skills to draw diagrams.

Listing 12: A ditaa diagram

```
1  #+BEGIN_SRC ditaa :file images/architecture.png :exports results
2                                                         +---------+
3                                /----------------\   |Lucene{s}|
4                                |Search          +---+---------+
5                                +----------------+   | H2 {s} |
6          SWANK                 |Source Resolver |   +---------+
7            |                   +----------------+
8   +-----+  :  +--------------+ |Doc Server      |   +--------+
9   |Emacs|<--->|   Project    +----+--------------+   | JVM{io}|
10  +-----+  |  +---+---------+ |  |Debug Manager   +---+--------+
11           :      |       ^  :  +----------------+
12           |  +---+----+   |  |  |Analyzer        +---+-----------+
13           |  |File{io}|   |  |  \----------------/   |scalac     |
14           |  |Watchers|   |  |                       +-----------+
15           |  +--------+   |  |  /----------\         |Refactoring|
16           |     ^         |  +--+Formatting|         +-----------+
17           |     |         |     \----------/
18           +----|-=--------|-=------------------------------
19      +-----+   |     +------++
20      |Files+--+    |.ensime|
21      +-----+       +-------+
22  #+END_SRC
```

Is converted to the following image.
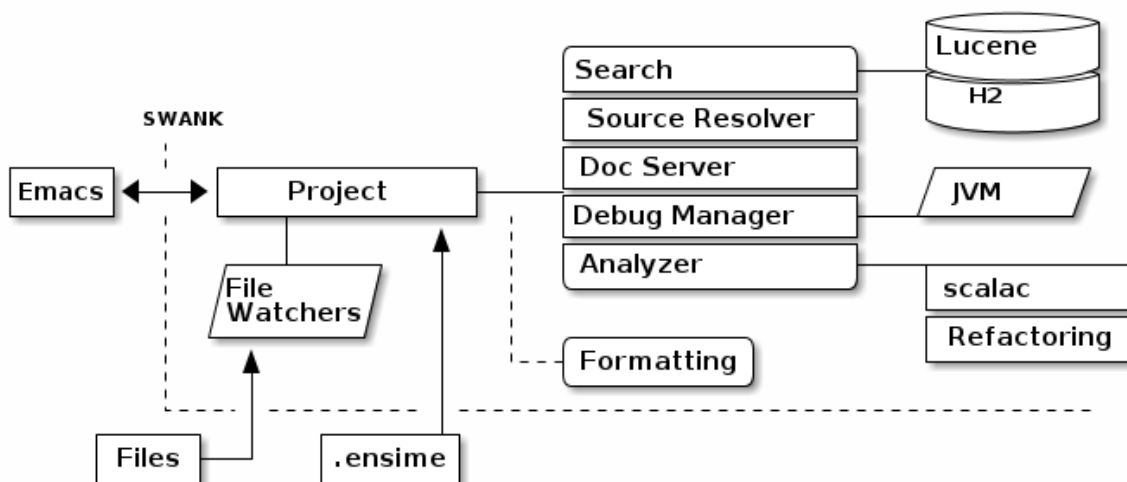
1.7 Links

1.7.1 To external sources

Listing 13: Links to external sources

```
1  See http://www.orgmode.org (automatic!) and the
2  [[http://orgmode.org/][Org mode Web site]].
```

See http://www.orgmode.org (automatic!) and the Org mode Web site.

1.7.2 To documents

Listing 14: Links to documents

```
1  [[./introduction.org][Inception!]]
```

Inception!

1.7.3 Links to headings

In the chapter, References, below the heading is annotated with custom properties.

Listing 15: Links to headings

```
1  * References
2    :PROPERTIES:
3    :CUSTOM_ID: References
4    :END:
```

Then you can reference the heading using a link.
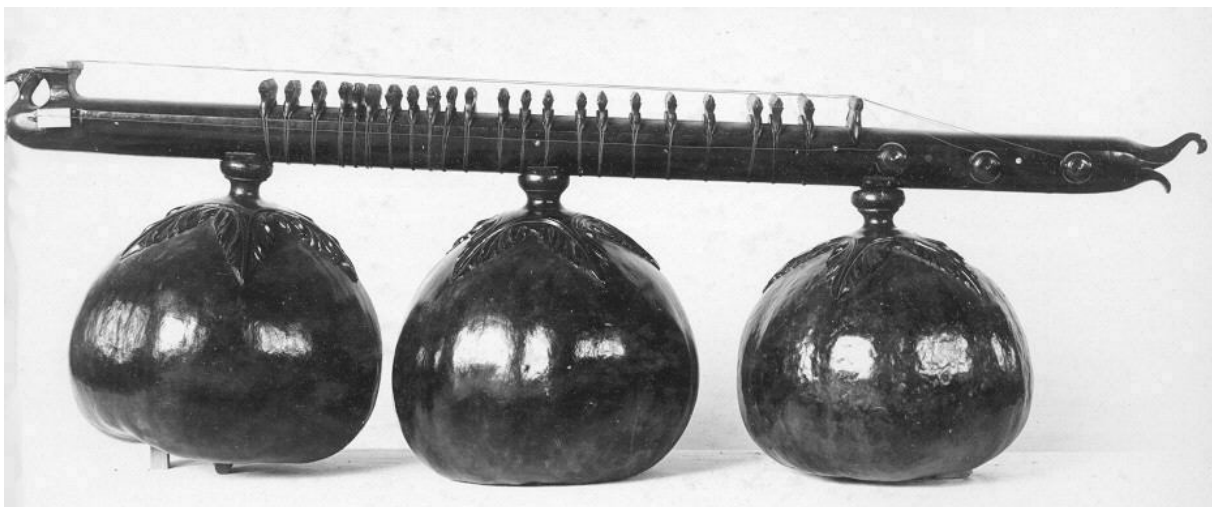
Listing 16: Using the link

```
1  See chapter [[#References][References]].
```

See chapter References.

1.7.4 Images

Listing 17: An immage

```
1  [[./images/test.jpg]]
```


Figuur 1: Some image

The current version of pandoc seems to have an issue with identifying the images when the extension is uppercase or pdf. It is tracked in issue 5454 on github (https://github.com/jgm/pandoc/issues/5454).
If you have issues loading images, please check that one.

1.7.5 Figures and tables

Listing 18: An figure

```
1  #+label: fig:naame
2  #+caption: caption
3  [[file:images/test.jpg]]
4
5  See figure [@fig:name].
```
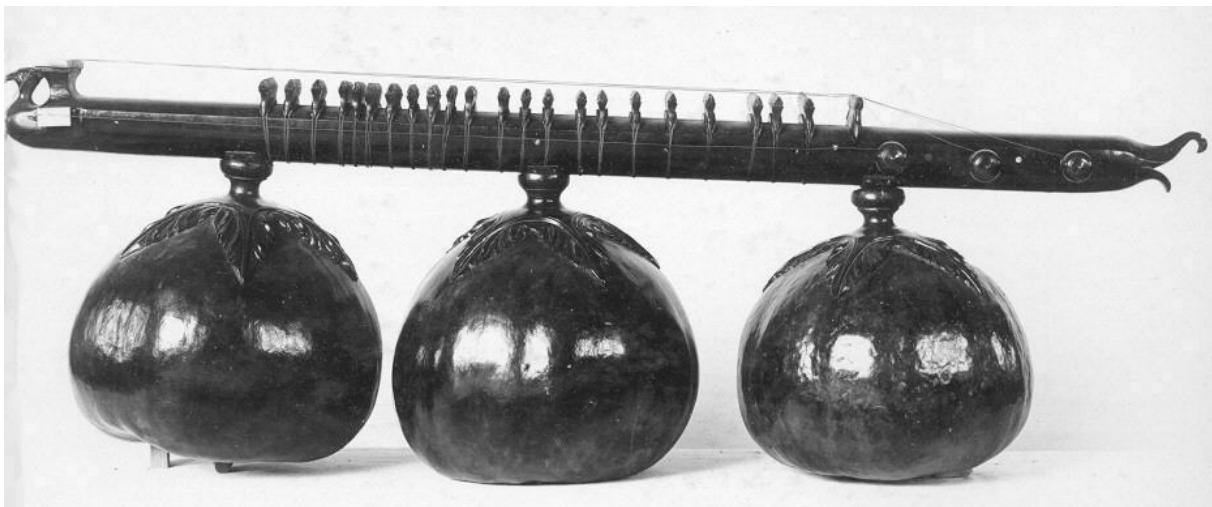

Figuur 2: caption

See figure Figure 2 .

> 🔥 Due to the use of citeproc this does not work. Citeproc claims this reference for itself. The solution seems to be to use `org-ref` instead of citeproc.
> Source: https://emacs.stackexchange.com/questions/32648/in-org-mode-how-do-i-reference-a-figure

1.8 Admonitions

Admonitions (contextual backgrounds) are statements taken out of the content's flow and labeled with a title.

Common admonitions are:

1. note

2. warning

3. tip

4. caution

5. important

Listing 19: Admonitions

```
 1  #+begin_note
 2  This is a useful note.
 3  #+end_note
 4
 5  #+begin_warning
 6  Be careful!  Check that you have...
 7  #+end_warning
 8
 9  #+begin_tip
10  Try doing it this way...
11  #+end_tip
12
13  #+begin_caution
14  Caution
15  #+end_caution
16
17  #+begin_important
18  Important
19  #+end_important
```

This is a useful note.

Be careful! Check that you have…

Try doing it this way…

Caution

(!) Important

1.8.1 Additional admontions

This can be achieved by using Awesomebox

Listing 20: A latex version

```
1  \begin{noteblock}
2  Another way to create a box
3  \end{noteblock}
```

(i) Another way to create a box

1.9 Formula

Listing 21: A formula

```
1  The formula \(a^2 + b^2 = c^2\) has been discovered by Pythagoras.
2
3  Let \(a=\sin(x) + \cos(x)\). Then \(a^2 = 2\sin(x)\cos(x)\) because \(\
       sin^2x +
4  \cos^2x = 1\).
```

The formula $a^2 + b^2 = c^2$ has been discovered by Pythagoras.

Let $a = \sin(x) + \cos(x)$. Then $a^2 = 2\sin(x)\cos(x)$ because $\sin^2 x + \cos^2 x = 1$.

Listing 22: Another formula

```
1  The /Euler theorem/:
2
3  \[
4  \int_0^\infty e^{-x^2} dx = {{\sqrt{\pi}} \over {2}}
5  \]
6
7  LaTeX allows to inline such ~\[...\]~ constructs (/quadratic formula/):
8  \[ \frac{-b \pm \sqrt{b^2 - 4 a c}}{2a} \]
```

The *Euler theorem*:

$$\int_0^\infty e^{-x^2}\,dx = \frac{\sqrt{\pi}}{2}$$

LaTeX allows to inline such \[...\] constructs (*quadratic formula*):

$$\frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

2 References

If you want to include a list of references in your document, which you should if you are writing a serious paper, then use the following code to include it in this section.

Listing 23: Using a bibliography

```
1  #+ATTR_HTML: :id refs
2  #+BEGIN_bibliography
3  #+END_bibliography
```

The result will be:

SURF. (2018). *De APA-richtlijnen uitgelegd : een praktische handleiding voor bronvermelding in het hoger onderwijs*. Utrecht: SURF.

3 Appendix

some stuff afterwards.