# User Manual

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# 1 Introduction

This tool allows you to animate a SVG file with a VCD file which come from a simulation tool. There are a few steps to follow to make the tool working with your files. But don't worry, it will be very easy.

# 2 VCD file

In order to generate your VCD file, you will probably use tools like GHDL. This tool is normally fully-compatible with GHDL and not tested with other tools (because of the lack of time and of the price of the licence). What you have to do with your VCD file is to find the name of the variable and the module where the variable take place. Let take an example.

```
$date
    Thu Jul  9 10:11:34 2015
$end
$version
    GHDL v0
$end
$timescale
    1 fs
$end
$var reg 8 ! resultat[7:0] $end
$var reg 1 " monreset $end
$scope module uut $end
$var reg 1 # reset $end
$upscope $end
```

If you want to animate the variable called "reset", you need to note somewhere (inside your brain, if you have one) "uut.reset".

# 3 SVG file

There are three things to do with the SVG file. There is no restrictions on the SVG file BUT you need to follow these steps.

## 3.1 Create groups

You need to create extra groups in order to make the tool working :

### 3.1.1 1 bit variable

A group for a 1-bit variable must contains :

- 1 or more path.
- 1 text filled as follow.

### 3.1.2   n bits variable

A group for a n-bit variable must contains :

- 1 or more path.

- 1 text with a value "#value#"

- 1 text filled as follow.

## 3.2   Add !!

The SVG name is the value of the tspan node in the group you just define. You MUST add '!' before and after the name. You must also note the SVG name for the COR file.

## 3.3   Add an attribute

In order to say to the tool that this group is animated, you must add the attribute "f2d=yes" to the g node.

## 3.4   Example

Here is the SVG file for our example.

```
<g
  f2d="yes"
  id="g3387">
<path
    transform="matrix(1.7426543,0,0,1.5321982,-493.07809,155.18924)"
    inkscape:connector-curvature="0"
    id="path2983-91"
    d="m 531.0877,203.58151 c 0.50507,-28.53681 0,-29.04188 0,-29.04188"
<text
    xml:space="preserve"
    x="424.87717"
    y="416.3732"
    id="text3113-9-5-9"
    sodipodi:linespacing="125%"><tspan
        sodipodi:role="line"
        id="tspan3115-1-2-2"
        x="424.87717"
        y="416.3732"
        style="font-size:12px;fill:#280b0b">!X1!</tspan></text>
</g>
```

# 4   COR file

A COR file is a very simple file that make the correspondance between the SVG file and the VCD file. Each lign is a pair of a VCD name and a SVG name. The syntax for a lign is the following :

$$SVG\_name:VCD\_name$$

Here is the COR file for our example.

```
rst : uut . reset
```

# 5   Bug report

If you found some bugs or if you want new functionalities, feel free to send me an e-mail.