—ga— is a binary format as an istruction set similar to a sort of assembler language that describes simple graphic objects like lines and rectangles. This file contains tests aiming to check the pdfliteral driver capability to render such ga streams—usually a Lua array.

The pdfliteral driver directly inserts PDF vector graphic primitives within the output and should be intented as the "native" driver of barracuda package.

The complete reference of the —ga— format is available throgh out the content of the "ga-grammar.tex" file.

Please note that all dimensions are in scaled point, the very small TEX internal unit, in fact we have that 65536sp = 1pt.

Running the source file with luatex. The typesetting engine executes the directlua macro, so vector graphics appear in the PDF output file.

Let's start drawing an horizontal line 100pt long:

or two different parallel lines 24pt long:

and again two horizontal lines 10pt thick, touching a corner:

Several vertical lines with its horizontal limits:

Finally a little rectangle:

Test number 1: a vbar 2pt width, 20pt height:

Test number 2: ten vbars in a row equally spaced by 10pt:

Test number 3: two series of vbars 10pt and 5pt large:

Test number 4: a bunch of thin vertical bars (25):

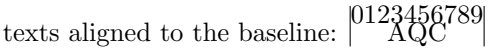
Test number 5: two rows of a bunch of thin bars:

Test number 6: staircase of Vbars (manually data definition):

Test number 7: vbars with spaced text, in three different rows:

Test number 8: spaced text (checking the correct vertical alignment):

Test number 9: spaced text, check correct vertical alignment: 

Test number 10: two centered texts aligned to the baseline: 

So far, we have manually build data for ga stream. Next we are going to use the ga-canvas library.

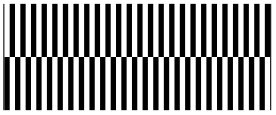
In fact, all the previous tests are rebuild with the ga-canvas library.

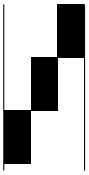
Test 1: a vbar 2pt width, 20pt height:

Test 2: ten vbars equally spaced by 10pt: 

Test 3: two series of vbars 10pt and 5pt large: 

Test 4: a bunch of thin bars: 

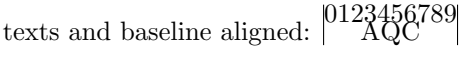
Test 5: two levels of a bunch of thin bars: 

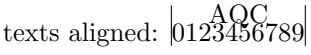
Test number 6: staircase of bars (manual insertion of data): 

Test number 7: vbars with spaced text, all in three rows: 

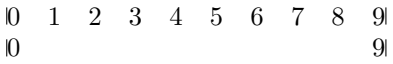
Test 8: spaced text, check correct vertical alignment: 

Test number 9: spaced text, check correct vertical alignment: 

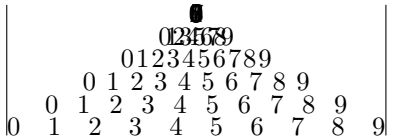
Test number 10: two centered texts and baseline aligned: 

Test number 11: two centered texts aligned: 

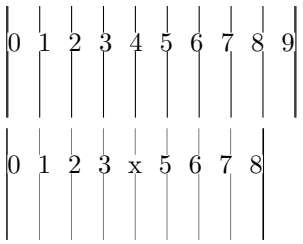
Test number 12: text_xwidth opcode:



Test number 13: text_xwidth with different size:



Test number 14: place bars and text as text_xwidth:



Test number 15: place text_xwidth when text is only two chars long: