Gura モジュールリファレンス - cairo

Updated: February 21, 2013

copyright © 2011- Yutaka Saito ([ypsitau@nifty.com](mailto:ypsitau@nifty.com))

Official site: <http://www.gura-lang.org/>

目次

1. このリファレンスについて 3

2. リファレンス 4

2.1. 命名規則 4

2.2. imageクラスの拡張 4

2.2.1. インスタンスメソッド 4

2.3. 定数値 5

2.3.1. cairo\_path\_data\_type\_t 5

2.3.2. cairo\_antialias\_t 5

2.3.3. cairo\_fill\_rule\_t 5

2.3.4. cairo\_line\_cap\_t 5

2.3.5. cairo\_line\_join\_t 5

2.3.6. cairo\_font\_slant\_t 5

2.3.7. cairo\_font\_weight\_t 5

2.3.8. cairo\_font\_type\_t 6

2.3.9. cairo\_operator\_t 6

2.3.10. cairo\_region\_overlap\_t 7

2.3.11. cairo\_extend\_t 7

2.3.12. cairo\_filter\_t 7

2.3.13. cairo\_content\_t 7

2.3.14. cairo\_subpixel\_order\_t 7

2.3.15. cairo\_hint\_style\_t 7

2.3.16. cairo\_hint\_metrics\_t 8

2.3.17. cairo\_surface\_type\_t 8

2.4. cairo.surfaceクラス 8

2.4.1. インスタンスメソッド 8

2.5. cairo.patternクラス 9

2.5.1. インスタンスの生成 9

2.5.2. インスタンスメソッド 9

2.6. cairo.regionクラス 10

2.6.1. インスタンスメソッド 10

2.7. cairo.contextクラス 11

2.7.1. インスタンスの生成 11

2.7.2. インスタンスメソッド 11

このリファレンスについて

本リファレンスはGura のcairoモジュールで定義されている関数やクラスの仕様について説明します。

Cairoのオフィシャルサイトはhttp://cairographics.org/ です。

リファレンス

## imageクラスの拡張

### インスタンスメソッド

image#cairo() {block?}

## 定数値

### cairo\_path\_data\_type\_t

|  |  |
| --- | --- |
| cairo.PATH\_MOVE\_TO |  |
| cairo.PATH\_LINE\_TO |  |
| cairo.PATH\_CURVE\_TO |  |
| cairo.PATH\_CLOSE\_PATH |  |

### cairo\_antialias\_t

|  |  |
| --- | --- |
| cairo.ANTIALIAS\_DEFAULT |  |
| cairo.ANTIALIAS\_NONE |  |
| cairo.ANTIALIAS\_GRAY |  |
| cairo.ANTIALIAS\_SUBPIXEL |  |

### cairo\_fill\_rule\_t

|  |  |
| --- | --- |
| cairo.FILL\_RULE\_WINDING |  |
| cairo.FILL\_RULE\_EVEN\_ODD |  |

### cairo\_line\_cap\_t

|  |  |
| --- | --- |
| cairo.LINE\_CAP\_BUTT |  |
| cairo.LINE\_CAP\_ROUND |  |
| cairo.LINE\_CAP\_SQUARE |  |

### cairo\_line\_join\_t

|  |  |
| --- | --- |
| cairo.LINE\_JOIN\_MITER |  |
| cairo.LINE\_JOIN\_ROUND |  |
| cairo.LINE\_JOIN\_BEVEL |  |

### cairo\_font\_slant\_t

|  |  |
| --- | --- |
| cairo.FONT\_SLANT\_NORMAL |  |
| cairo.FONT\_SLANT\_ITALIC |  |
| cairo.FONT\_SLANT\_OBLIQUE |  |

### cairo\_font\_weight\_t

|  |  |
| --- | --- |
| cairo.FONT\_WEIGHT\_NORMAL |  |
| cairo.FONT\_WEIGHT\_BOLD |  |

### cairo\_font\_type\_t

|  |  |
| --- | --- |
| cairo.FONT\_TYPE\_TOY |  |
| cairo.FONT\_TYPE\_FT |  |
| cairo.FONT\_TYPE\_WIN32 |  |
| cairo.FONT\_TYPE\_QUARTZ |  |
| cairo.FONT\_TYPE\_USER |  |

### cairo\_operator\_t

|  |  |
| --- | --- |
| cairo.OPERATOR\_CLEAR |  |
| cairo.OPERATOR\_SOURCE |  |
| cairo.OPERATOR\_OVER |  |
| cairo.OPERATOR\_IN |  |
| cairo.OPERATOR\_OUT |  |
| cairo.OPERATOR\_ATOP |  |
| cairo.OPERATOR\_DEST |  |
| cairo.OPERATOR\_DEST\_OVER |  |
| cairo.OPERATOR\_DEST\_IN |  |
| cairo.OPERATOR\_DEST\_OUT |  |
| cairo.OPERATOR\_DEST\_ATOP |  |
| cairo.OPERATOR\_XOR |  |
| cairo.OPERATOR\_ADD |  |
| cairo.OPERATOR\_SATURATE |  |
| cairo.OPERATOR\_MULTIPLY |  |
| cairo.OPERATOR\_SCREEN |  |
| cairo.OPERATOR\_OVERLAY |  |
| cairo.OPERATOR\_DARKEN |  |
| cairo.OPERATOR\_LIGHTEN |  |
| cairo.OPERATOR\_COLOR\_DODGE |  |
| cairo.OPERATOR\_COLOR\_BURN |  |
| cairo.OPERATOR\_HARD\_LIGHT |  |
| cairo.OPERATOR\_SOFT\_LIGHT |  |
| cairo.OPERATOR\_DIFFERENCE |  |
| cairo.OPERATOR\_EXCLUSION |  |
| cairo.OPERATOR\_HSL\_HUE |  |
| cairo.OPERATOR\_HSL\_SATURATION |  |
| cairo.OPERATOR\_HSL\_COLOR |  |
| cairo.OPERATOR\_HSL\_LUMINOSITY |  |

### cairo\_region\_overlap\_t

|  |  |
| --- | --- |
| cairo.REGION\_OVERLAP\_IN |  |
| cairo.REGION\_OVERLAP\_OUT |  |
| cairo.REGION\_OVERLAP\_PART |  |

### cairo\_extend\_t

|  |  |
| --- | --- |
| cairo.EXTEND\_NONE |  |
| cairo.EXTEND\_REPEAT |  |
| cairo.EXTEND\_REFLECT |  |
| cairo.EXTEND\_PAD |  |

### cairo\_filter\_t

|  |  |
| --- | --- |
| cairo.FILTER\_FAST |  |
| cairo.FILTER\_GOOD |  |
| cairo.FILTER\_BEST |  |
| cairo.FILTER\_NEAREST |  |
| cairo.FILTER\_BILINEAR |  |
| cairo.FILTER\_GAUSSIAN |  |

### cairo\_content\_t

|  |  |
| --- | --- |
| cairo.CONTENT\_COLOR |  |
| cairo.CONTENT\_ALPHA |  |
| cairo.CONTENT\_COLOR\_ALPHA |  |

### cairo\_subpixel\_order\_t

|  |  |
| --- | --- |
| cairo.SUBPIXEL\_ORDER\_DEFAULT |  |
| cairo.SUBPIXEL\_ORDER\_RGB |  |
| cairo.SUBPIXEL\_ORDER\_BGR |  |
| cairo.SUBPIXEL\_ORDER\_VRGB |  |
| cairo.SUBPIXEL\_ORDER\_VBGR |  |

### cairo\_hint\_style\_t

|  |  |
| --- | --- |
| cairo.HINT\_STYLE\_DEFAULT |  |
| cairo.HINT\_STYLE\_NONE |  |
| cairo.HINT\_STYLE\_SLIGHT |  |
| cairo.HINT\_STYLE\_MEDIUM |  |
| cairo.HINT\_STYLE\_FULL |  |

### cairo\_hint\_metrics\_t

|  |  |
| --- | --- |
| cairo.HINT\_METRICS\_DEFAULT |  |
| cairo.HINT\_METRICS\_OFF |  |
| cairo.HINT\_METRICS\_ON |  |

### cairo\_surface\_type\_t

|  |  |
| --- | --- |
| cairo.SURFACE\_TYPE\_IMAGE |  |
| cairo.SURFACE\_TYPE\_PDF |  |
| cairo.SURFACE\_TYPE\_PS |  |
| cairo.SURFACE\_TYPE\_XLIB |  |
| cairo.SURFACE\_TYPE\_XCB |  |
| cairo.SURFACE\_TYPE\_GLITZ |  |
| cairo.SURFACE\_TYPE\_QUARTZ |  |
| cairo.SURFACE\_TYPE\_WIN32 |  |
| cairo.SURFACE\_TYPE\_BEOS |  |
| cairo.SURFACE\_TYPE\_DIRECTFB |  |
| cairo.SURFACE\_TYPE\_SVG |  |
| cairo.SURFACE\_TYPE\_OS2 |  |
| cairo.SURFACE\_TYPE\_WIN32\_PRINTING |  |
| cairo.SURFACE\_TYPE\_QUARTZ\_IMAGE |  |
| cairo.SURFACE\_TYPE\_SCRIPT |  |
| cairo.SURFACE\_TYPE\_QT |  |
| cairo.SURFACE\_TYPE\_RECORDING |  |
| cairo.SURFACE\_TYPE\_VG |  |
| cairo.SURFACE\_TYPE\_GL |  |
| cairo.SURFACE\_TYPE\_DRM |  |
| cairo.SURFACE\_TYPE\_TEE |  |
| cairo.SURFACE\_TYPE\_XML |  |
| cairo.SURFACE\_TYPE\_SKIA |  |
| cairo.SURFACE\_TYPE\_SUBSURFACE |  |

## cairo.surfaceクラス

### インスタンスメソッド

cairo.surface#copy\_page():reduce

cairo.surface#finish():reduce

cairo.surface#flush():reduce

cairo.surface#get\_content()

cairo.surface#get\_device()

cairo.surface#get\_device\_offset()

cairo.surface#get\_fallback\_resolution()

cairo.surface#get\_font\_options()

cairo.surface#get\_mime\_data()

cairo.surface#has\_show\_text\_glyphs()

cairo.surface#mark\_dirty():reduce

cairo.surface#mark\_dirty\_rectangle(x:number, y:number, width:number, height:number):reduce

cairo.surface#set\_device\_offset(x\_offset:number, y\_offset:number):reduce

cairo.surface#set\_fallback\_resolution(x\_pixels\_per\_inch:number, y\_pixels\_per\_inch:number):reduce

cairo.surface#set\_mime\_data():reduce

cairo.surface#show\_page():reduce

## cairo.patternクラス

### インスタンスの生成

cairo.pattern\_create\_color(color:color, alpha?:number) {block?}

cairo.pattern\_create\_for\_surface(surface:surface) {block?}

cairo.pattern\_create\_linear(x0:number, y0:number, x1:number, y1:number) {block?}

cairo.pattern\_create\_radial(cx0:number, cy0:number, radius0:number,  
 cx1:number, cy1:number, radius1:number) {block?}

cairo.pattern\_create\_rgb(red:number, green:number, blue:number) {block?}

cairo.pattern\_create\_rgba(red:number, green:number, blue:number, alpha:number) {block?}

### インスタンスメソッド

cairo.pattern#add\_color\_stop\_rgb(offset:number, red:number, green:number, blue:number):reduce

cairo.pattern#add\_color\_stop\_rgba(offset:number, red:number, green:number, blue:number, alpha:number):reduce

cairo.pattern#get\_color\_stop\_count()

cairo.pattern#get\_color\_stop\_rgba(index:number)

cairo.pattern#get\_extend()

cairo.pattern#get\_filter()

cairo.pattern#get\_linear\_points()

cairo.pattern#get\_matrix()

cairo.pattern#get\_radial\_circles():reduce

cairo.pattern#get\_rgba()

cairo.pattern#get\_surface()

cairo.pattern#set\_extend(extend:symbol):reduce

cairo.pattern#set\_filter(filter:symbol):reduce

cairo.pattern#set\_matrix(matrix:matrix):reduce

## cairo.regionクラス

### インスタンスメソッド

cairo.region#contains\_point(x:number, y:number)

cairo.region#contains\_rectangle(rectangle:rectangle\_int)

cairo.region#equal(region:region)

cairo.region#intersect(other:region)

cairo.region#intersect\_rectangle(rectangle:rectangle\_int)

cairo.region#is\_empty()

cairo.region#subtract(other:region)

cairo.region#subtract\_rectangle(rectangle:rectangle\_int)

cairo.region#translate(dx:number, dy:number)

cairo.region#union(other:region)

cairo.region#union\_rectangle(rectangle:rectangle\_int)

cairo.region#xor(other:region)

cairo.region#xor\_rectangle(rectangle:rectangle\_int)

## cairo.contextクラス

### インスタンスの生成

cairo.emf\_create(filename:string, width\_in\_points:number, height\_in\_points:number) {block?}

cairo.image\_create(width:number, height:number, color?:color) {block?}

cairo.pdf\_create(stream:stream, width\_in\_points:number, height\_in\_points:number) {block?}

cairo.ps\_create(stream:stream, width\_in\_points:number, height\_in\_points:number) {block?}

cairo.svg\_create(stream:stream, width\_in\_points:number, height\_in\_points:number) {block?}

### インスタンスメソッド

cairo.context#arc(xc:number, yc:number, radius:number, angle1?:number, angle2?:number):map:reduce

cairo.context#arc\_negative(xc:number, yc:number, radius:number, angle1?:number, angle2?:number):map:reduce

cairo.context#clip():reduce

cairo.context#clip\_extents()

cairo.context#clip\_preserve():reduce

cairo.context#close\_path():reduce

cairo.context#copy\_clip\_rectangle\_list()

cairo.context#copy\_page():reduce

cairo.context#copy\_path()

cairo.context#copy\_path\_flat()

cairo.context#curve\_to(x1:number, y1:number, x2:number, y2:number, x3:number, y3:number):map:reduce

cairo.context#device\_to\_user(x:number, y:number)

cairo.context#device\_to\_user\_distance(dx:number, dy:number)

cairo.context#fill():reduce

cairo.context#fill\_extents():reduce

cairo.context#fill\_preserve():reduce

cairo.context#font\_extents()

cairo.context#get\_antialias()

cairo.context#get\_current\_point()

cairo.context#get\_dash()

cairo.context#get\_fill\_rule()

cairo.context#get\_font\_face()

cairo.context#get\_font\_matrix()

cairo.context#get\_font\_options()

cairo.context#get\_group\_target()

cairo.context#get\_line\_cap()

cairo.context#get\_line\_join()

cairo.context#get\_line\_width()

cairo.context#get\_matrix()

cairo.context#get\_miter\_limit()

cairo.context#get\_operator()

cairo.context#get\_scaled\_font()

cairo.context#get\_source()

cairo.context#get\_target()

cairo.context#get\_tolerance()

cairo.context#glyph\_extents()

cairo.context#has\_current\_point()

cairo.context#identity\_matrix():reduce

cairo.context#in\_clip(x:number, y:number)

cairo.context#in\_fill(x:number, y:number)

cairo.context#in\_stroke(x:number, y:number)

cairo.context#line\_to(x:number, y:number):map:reduce

cairo.context#mask(pattern:pattern):reduce

cairo.context#mask\_surface(surface:surface, surface\_x:number, surface\_y:number):reduce

cairo.context#move\_to(x:number, y:number):map:reduce

cairo.context#new\_path():reduce

cairo.context#new\_sub\_path():reduce

cairo.context#paint():reduce

cairo.context#paint\_with\_alpha(alpha:number):reduce

cairo.context#path\_extents()

cairo.context#pop\_group()

cairo.context#pop\_group\_to\_source():reduce

cairo.context#push\_group():reduce

cairo.context#push\_group\_with\_content(content:symbol):reduce

cairo.context#rectangle(x:number, y:number, width:number, height:number):map:reduce

cairo.context#rel\_curve\_to(dx1:number, dy1:number, dx2:number, dy2:number, dx3:number, dy3:number):map:reduce

cairo.context#rel\_line\_to(dx:number, dy:number):map:reduce

cairo.context#rel\_move\_to(dx:number, dy:number):map:reduce

cairo.context#reset\_clip():reduce

cairo.context#restore():reduce

cairo.context#rotate(angle:number):reduce

cairo.context#save():reduce {block?}

cairo.context#scale(sx:number, sy:number):reduce

cairo.context#select\_font\_face(family:string, slant:symbol, weight:symbol):reduce

cairo.context#set\_antialias(antialias:symbol):reduce

cairo.context#set\_dash(dashes[]:number, offset:number):reduce

cairo.context#set\_fill\_rule(fill\_rule:symbol):reduce

cairo.context#set\_font\_face():reduce

cairo.context#set\_font\_matrix(matrix:matrix):reduce

cairo.context#set\_font\_options(options:font\_options):reduce

cairo.context#set\_font\_size(size:number):reduce

cairo.context#set\_line\_cap(line\_cap:symbol):reduce

cairo.context#set\_line\_join(line\_join:symbol):reduce

cairo.context#set\_line\_width(width:number):reduce

cairo.context#set\_matrix(matrix:matrix):reduce

cairo.context#set\_miter\_limit(limit:number):reduce

cairo.context#set\_operator(op:symbol):reduce

cairo.context#set\_scaled\_font():reduce

cairo.context#set\_source(source:pattern):reduce

cairo.context#set\_source\_color(color:color, alpha?:number):reduce

cairo.context#set\_source\_rgb(red:number, green:number, blue:number):reduce

cairo.context#set\_source\_rgba(red:number, green:number, blue:number, alpha:number):reduce

cairo.context#set\_source\_surface(surface:surface, x:number, y:number):reduce

cairo.context#set\_tolerance(tolerance:number):reduce

cairo.context#show\_glyphs(glyphs[]:glyph):reduce

cairo.context#show\_page():reduce

cairo.context#show\_text(text:string):reduce

cairo.context#show\_text\_glyphs():reduce

cairo.context#stroke():reduce

cairo.context#stroke\_extents()

cairo.context#stroke\_preserve():reduce

cairo.context#text\_extents(text:string)

cairo.context#text\_path(text:string):map:reduce

cairo.context#transform(matrix:matrix):reduce

cairo.context#translate(tx:number, ty:number):reduce

cairo.context#user\_to\_device(x:number, y:number)

cairo.context#user\_to\_device\_distance(dx:number, dy:number)