| | [**Overview**](http://docs.google.com/index-overview-summary.html) | [**Project**](http://docs.google.com/project-summary.html) | **Class** | [**Tree**](http://docs.google.com/project-tree.html) | [**Deprecated**](http://docs.google.com/index-deprecated-list.html) | [**Index**](http://docs.google.com/index-all.html) | | --- | --- | --- | --- | --- | --- | | | ***CarnegieMellonGraphics*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**FRAMES**](http://docs.google.com/index.html)    [**NO FRAMES**](http://docs.google.com/CarnegieMellonGraphics2/Style.html) |
| SUMMARY:  INNER | [FIELD](#1fob9te) | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL:  [FIELD](#tyjcwt) | [CONSTR](#26in1rg) | [METHOD](#44sinio) |  |

## **CarnegieMellonGraphics2**

Class Style

   in [CarnegieMellonGraphics.h](http://docs.google.com/CarnegieMellonGraphics.h.html)

class **Style**

Style objects are used to encapsulate several pieces of style information to be passed to drawing calls. At the most basic level styles store color information, but they also contain information about line-widths, the type of raster operation to use when rendering, and what pattern to use when drawing lines and outline primatives.

So if you want to draw a green line you could create a style like so:

Style mystyle = Style(Color::GREEN);

or

Style mystyle = Style(Color(0,0,255));

However, when you draw your line it will only be one pixel thick. If you want a thicker green line (3 pixels wide) you can do the following:

Style mystyle = Style(Color::GREEN, 3);

In another situation you might want to create an rubber-banding box by XORing and outline rectangle, so you would create the following style:

Style mystyle = Style(Color::BLUE, 2, Style::XOR\_OP);

Patterns for lines, arcs, and curves are represented using 16 bits.

| **Inner Classes, Typedefs, and Enums** | |
| --- | --- |
| typedef | [**Style::RasterOp**](http://docs.google.com/CarnegieMellonGraphics2/Style..RasterOp.html)            Possible raster operations   | COPY\_OP | Simply draw the color, default behavior | | --- | --- | | INVERT\_OP | Invert the drawing surface's color | | XOR\_OP | XOR drawing surface with color | | AND\_OP | AND drawing surface with color | | OR\_OP | OR drawing surface with color | |

| **Field Summary** | |
| --- | --- |
| static const Style | [**BLACK**](#3dy6vkm) |
| static const Style | [**BLUE**](#1t3h5sf) |
| static const Style | [**GREEN**](#4d34og8) |
| static const Style | [**INVERTED**](#2s8eyo1) |
| static const Style | [**RED**](#17dp8vu) |
| static const Style | [**WHITE**](#3rdcrjn) |

| **Constructor Summary** | |
| --- | --- |
| **Style**( [Color](http://docs.google.com/CarnegieMellonGraphics2/Color.html) col, int lwidth = 1, [Style::RasterOp](http://docs.google.com/CarnegieMellonGraphics2/Style..RasterOp.html) rop = COPY\_OP, const std::vector< bool >& newpattern = defaultpattern )            Construct a style from a set of parameters |
| [**Style**](#1ksv4uv)( const [**Style**](#1ksv4uv)& s ) |

| **Method Summary** | |
| --- | --- |
| void | [**flipPatternBit**](#2jxsxqh)( int position ) |
| [Color](http://docs.google.com/CarnegieMellonGraphics2/Color.html) | [**getColor**](#3j2qqm3)() const |
| int | [**getLineWidth**](#4i7ojhp)() const |
| std::vector< bool > | [**getPattern**](#1ci93xb)() const |
| unsigned short | [**getPatternAsUShort**](#2bn6wsx)() const |
| [Style::RasterOp](http://docs.google.com/CarnegieMellonGraphics2/Style..RasterOp.html) | [**getRasterOp**](#3as4poj)() const |
| bool | [**operator!=**](#49x2ik5)( const Style& rhs ) const            Comparison operator for inequality on style objects |
| Style& | [**operator=**](#147n2zr)( const Style& rhs ) |
| bool | [**operator==**](#23ckvvd)( const Style& rhs ) const            Comparison operator for equality on style objects |
| void | [**setColor**](#32hioqz)( [Color](http://docs.google.com/CarnegieMellonGraphics2/Color.html) col ) |
| void | [**setLineWidth**](#41mghml)( int value ) |
| void | **setPattern**( const std::vector< bool >& newpattern ) |
| void | [**setRasterOp**](#1v1yuxt)( [Style::RasterOp](http://docs.google.com/CarnegieMellonGraphics2/Style..RasterOp.html) rop ) |

| **Field Detail** |
| --- |

### BLACK

public static const Style **BLACK**;

### BLUE

public static const Style **BLUE**;

### GREEN

public static const Style **GREEN**;

### INVERTED

public static const Style **INVERTED**;

### RED

public static const Style **RED**;

### WHITE

public static const Style **WHITE**;

| **Constructor Detail** |
| --- |

### Style

public **Style**( [Color](http://docs.google.com/CarnegieMellonGraphics2/Color.html) col, int lwidth = 1, [Style::RasterOp](http://docs.google.com/CarnegieMellonGraphics2/Style..RasterOp.html) rop = COPY\_OP, const std::vector< bool >& newpattern = defaultpattern );

Construct a style from a set of parameters

### Style

public **Style**( const **Style**& s );

| **Method Detail** |
| --- |

### flipPatternBit

public void **flipPatternBit**( int position );

### getColor

public [Color](http://docs.google.com/CarnegieMellonGraphics2/Color.html) **getColor**() const;

### getLineWidth

public int **getLineWidth**() const;

### getPattern

public std::vector< bool > **getPattern**() const;

### getPatternAsUShort

public unsigned short **getPatternAsUShort**() const;

### getRasterOp

public [Style::RasterOp](http://docs.google.com/CarnegieMellonGraphics2/Style..RasterOp.html) **getRasterOp**() const;

### operator!=

public bool **operator!=**( const Style& rhs ) const;

Comparison operator for inequality on style objects

### operator=

public Style& **operator=**( const Style& rhs );

### operator==

public bool **operator==**( const Style& rhs ) const;

Comparison operator for equality on style objects

### setColor

public void **setColor**( [Color](http://docs.google.com/CarnegieMellonGraphics2/Color.html) col );

### setLineWidth

public void **setLineWidth**( int value );

### setPattern

public void **setPattern**( const std::vector< bool >& newpattern );

### setRasterOp

public void **setRasterOp**( [Style::RasterOp](http://docs.google.com/CarnegieMellonGraphics2/Style..RasterOp.html) rop );

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