

ErrorSoft Low Graphics Library (ESLGL)

This lib use in my demo "n.29":

http://www.youtube.com/watch?v=zL_2NWtxLQE&feature=youtu.be

<http://www.pouet.net/prod.php?which=64031>

Many Sample

```
#include "Graphics.h"

#define clBlack 0
#define clWhite 1
#define clInvert 2

main(void)
{
    PBitMap BitMap;

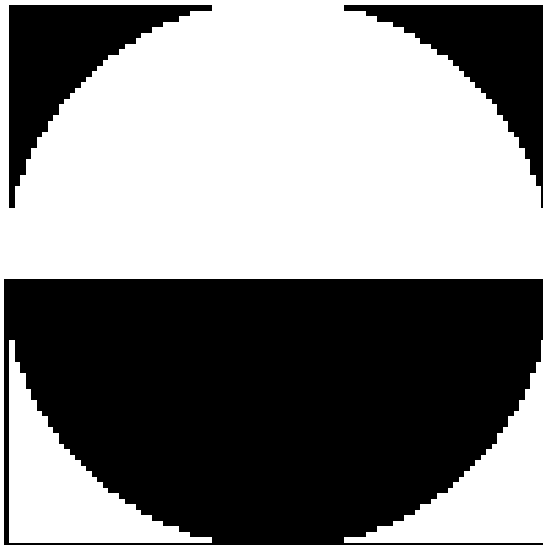
    BitMap = esCreateBitMap(100, 100, pflbit);

    esClear(BitMap, clWhite); // fill canvas
    esDrawRect(BitMap, 0, 0, 99, 99, clBlack);
    esFillEllipse(BitMap, 0, 0, 99, 99, clBlack);
    esFillRect(BitMap, 0, 0, 99, 49, clInvert);

    YourSystemDrawToScreenFunction(BitMap); // <- Write you!

    esFreeBitMap(BitMap);

    return 0;
}
```



It's Simple!

Overview

ESLGL – this is low-end graphics library, optimized to 4-bit and 1-bit per pixel graphics.

Library written on “C”, but imitate PLO.

Library supports these operations:

- BitMap`s
 - esCreateBitMap – Create new BitMap
 - esCreateStaticBitMap – Create new BitMap using a static map pixels
 - esCreateStaticMaskBitMap – Create new masked BitMap using a static map pixels
 - esResizeBitMap – Resize BitMap
 - esCloneBitMap – Clone this BitMap
 - esFreeBitMap – Free BitMap
 - esFreeStaticBitMap – Free static BitMap
- BitMap effects
 - esCopyBitMap
 - esInverseBitMap
 - esFlipVBitMap
 - esFlipHBitMap
 - esRotate90BitMap
- Main graphics
 - esClear
 - esSetPixel
 - esGetPixel
 - esFillRect
 - esDrawRect
 - esDrawLine
 - esDrawEllipse
 - esFillEllipse
- The BitBlt functions
 - **1 - bit**
 - esBitBlt01_Copy
 - ...
 - esBitBlt01_Mask
 - esBitBlt01
 - esBitBltRop01
 - **4 – bit**
 - esBitBlt04_Copy
 - ...
 - esBitBlt04_Color
 - esBitBltRop04
 - esBitBlt04
 - **Universal**
 - esBitBlt
 - esBitBltRop

- Strech draw functions
 - **1 – bit**
 - esStrechDraw01_Copy
 - esStrechDraw01_Or
 - esStrechDraw01_Xor
 - esStrechDraw01_And
 - esStrechDraw01_Mask
 - -
 - esStrechDraw01
 - esStrechDrawRop01
 - **4 – bit**
 - esStrechDraw04_Copy
 - esStrechDraw04_Or
 - esStrechDraw04_Xor
 - esStrechDraw04_And
 - esStrechDraw04_Mask
 - esStrechDraw04_Transparent
 - esStrechDraw04_Color
 - -
 - esStrechDraw04
 - esStrechDrawRop04
 - **Universal**
 - esStrechDraw
 - esStrechDrawRop
- other

Structurs

TPoint

Simple 2d point.

```
typedef struct
{
    int x, y;
} TPoint, *PPoint;
```

TRect

Recangle.

```
typedef struct
{
    int x1, y1;
    int x2, y2;
} TRect, *PRect;
```

TColor

```
typedef unsigned TColor;
```

TPixelFormat

```
typedef enum
{
    pf1bit = 1,
    pf2bit = 2,
    pf4bit = 4,
    pfC2 = 8
} TPixelFormat;
```

TAlphaFormat

```
typedef enum
{
    afNone = 0,
    afMask = 16,
    afColor = 32
} TAlphaFormat;
```

TRop

This operation apply for BitBlt functions.

```
typedef enum
{
    ropCopy,
    ropOr,
    ropXor,
    ropAnd,
    ropNotAnd
} TRop;
```

TBitMap

Main struct library.

```
typedef struct
{
    int Width;
    int Height;
    unsigned char *Pixels;
    unsigned char *Mask;
    TPixelFormat PixelFormat;
    TAlphaFormat AlphaFormat;
    TColor TransparentColor;//todo: add default
    // precalc
    int Scanline;
} TBitMap, *PBitMap;
```

Pixels – pixels map

Mask – pixels map for mask

Scanline – precalc value, for height performance

- Use if define `USE_PRECALC_SCANLINE`

In the process of

writing, I will be **happy**

to help with

documentation...