
Subject: Can I turn the page a few degrees when printing?
Posted by [sergeynikitin](#) on Wed, 30 Mar 2011 07:06:57 GMT
[View Forum Message](#) <> [Reply to Message](#)

Dear friends! Can I turn the page a few degrees when printing?

I see that the pages before printing is stored as a Drawing. Drawing may be possible to turn a few degrees as a bitmap?

Subject: Re: Can I turn the page a few degrees when printing?
Posted by [Sender Ghost](#) on Mon, 11 Apr 2011 07:37:43 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hello, Sergey.

It possible to draw images, which can be rotated for needed angle, using various Rotate functions or `Painting::Rotate`. Also, some kind of anti-aliasing needed.

I created following simple application, using `ImageDraw`, but not tested for printing:

```
// main.cpp
#include <CtrlLib/CtrlLib.h>

using namespace Upp;

class App : public TopWindow {
public:
    typedef App CLASSNAME;
    App();
    // Ctrl widgets
    MenuBar menu;
    WithDropChoice<EditIntSpin> angle;
    ImageCtrl image;
    // Bars
    void MainBar(Bar& bar);
    void FileBar(Bar& bar);
    // Events
    void OnSaveAs();
    void OnPrint();
    void OnPreview();
    // Functions
    void DoDraw(ImageDraw& iw);
    Image GetImage();
};

App::App()
{
```

```

Title("Application for page rotation");
CenterScreen().Sizeable().MinimizeBox().MaximizeBox();
const Size sz(640, 480);
SetRect(sz);
SetMinSize(sz);

angle.NotNull().Min(0).Max(360).SetData(0);
for (int i = 0; i < 9; ++i) angle.AddList(i * 45);

angle.WhenEnter = angle.WhenSelect = THISBACK(OnPreview);

AddFrame(menu);
AddFrame(TopSeparatorFrame());
menu.Set(THISBACK(MainBar));
menu.Add(angle, 75);

Add(image.SizePos());

OnPreview();
}
// Bars
void App::MainBar(Bar& bar)
{
    bar.Add("File", THISBACK(FileBar));
}

void App::FileBar(Bar& bar)
{
    bar.Add("Save as..", THISBACK(OnSaveAs)).Key(K_CTRL_S);
    bar.Add("Print", THISBACK(OnPrint)).Key(K_ALT_P);
    bar.Add("Preview", THISBACK(OnPreview)).Key(K_ALT_R);
    bar.Separator();
    bar.Add("Exit", THISBACK(Close)).Key(K_ALT_Q);
}
// Events
void App::OnSaveAs()
{
    const String fileName = SelectFileSaveAs("*.png");

    if (!fileName.IsVoid())
    {
        PNGEncoder png;
        Image w = GetImage();
        png.SaveFile(fileName, w);
    }
}

void App::OnPrint()

```

```

{
    PrinterJob pj;

    if (pj.Execute())
    {
        Draw& w = pj.GetDraw();
        w.StartPage();
        w.DrawImage(0, 0, GetImage());
        w.EndPage();
    }
}

void App::OnPreview()
{
    if (!angle.Accept())
        return;

    image.SetImage(GetImage());
}
// Functions
void App::DoDraw(ImageDraw& w)
{
    w.DrawRect(w.GetPageSize(), SWhite);

    for (int i = 0; i < 10; ++i)
        w.DrawLine(50, 50,
            int(50 + 50 * sin(i * M_PI / 10)),
            int(50 + 50 * cos(i * M_PI / 10)),
            2, SLtGray);

    const String text("DRAWING");
    Size sz = GetTextSize(text, Courier(16).Italic());
    w.DrawText((100 - sz.cx) / 2, (100 - sz.cy) / 2, text, Courier(16).Italic());
}

Image App::GetImage()
{
    ImageDraw iw(240, 320);
    DoDraw(iw);
    Image w = iw;

    return Rotate(w, angle * 10);
}

GUI_APP_MAIN
{
    App app;
    app.Run();
}

```

```
}
```

And using `Painting::Rotate`:

```
#include <CtrlLib/CtrlLib.h>
#include <Painter/Painter.h>

using namespace Upp;

GUI_APP_MAIN
{
    const int width = 600, height = 800;

    PaintingPainter sw(width, height);
    sw.DrawRect(sw.GetPageSize(), SWhite);

    sw.Rotate(0.5); // value from working PainterExamples application, about 45 degrees.

    for (int i = 0; i < 10; ++i)
        sw.DrawLine(50, 50,
            int(50 + 50 * sin(i * M_PI / 10)),
            int(50 + 50 * cos(i * M_PI / 10)),
            2, SLtGray);

    const String text("DRAWING");
    Size sz = GetTextSize(text, Courier(16).Italic());
    sw.DrawText((100 - sz.cx) / 2, (100 - sz.cy) / 2, text, Courier(16).Italic());

    const String fileName = SelectFileSaveAs("*.png");

    if (!fileName.IsVoid())
    {
        ImageBuffer ib(width, height);
        BufferPainter bw(ib);
        bw.DrawPainting(0, 0, width, height, sw);

        PNGEncoder png;
        Image w = ib;
        png.SaveFile(fileName, w);
    }

    PrinterJob pj;

    if (PromptYesNo("Do you want to print?") == IDOK)
        if (pj.Execute())
            pj.GetDraw().DrawPainting(0, 0, width, height, sw);
}
```

```
}
```

File Attachments

1) [PageRotation.png](#), downloaded 566 times
