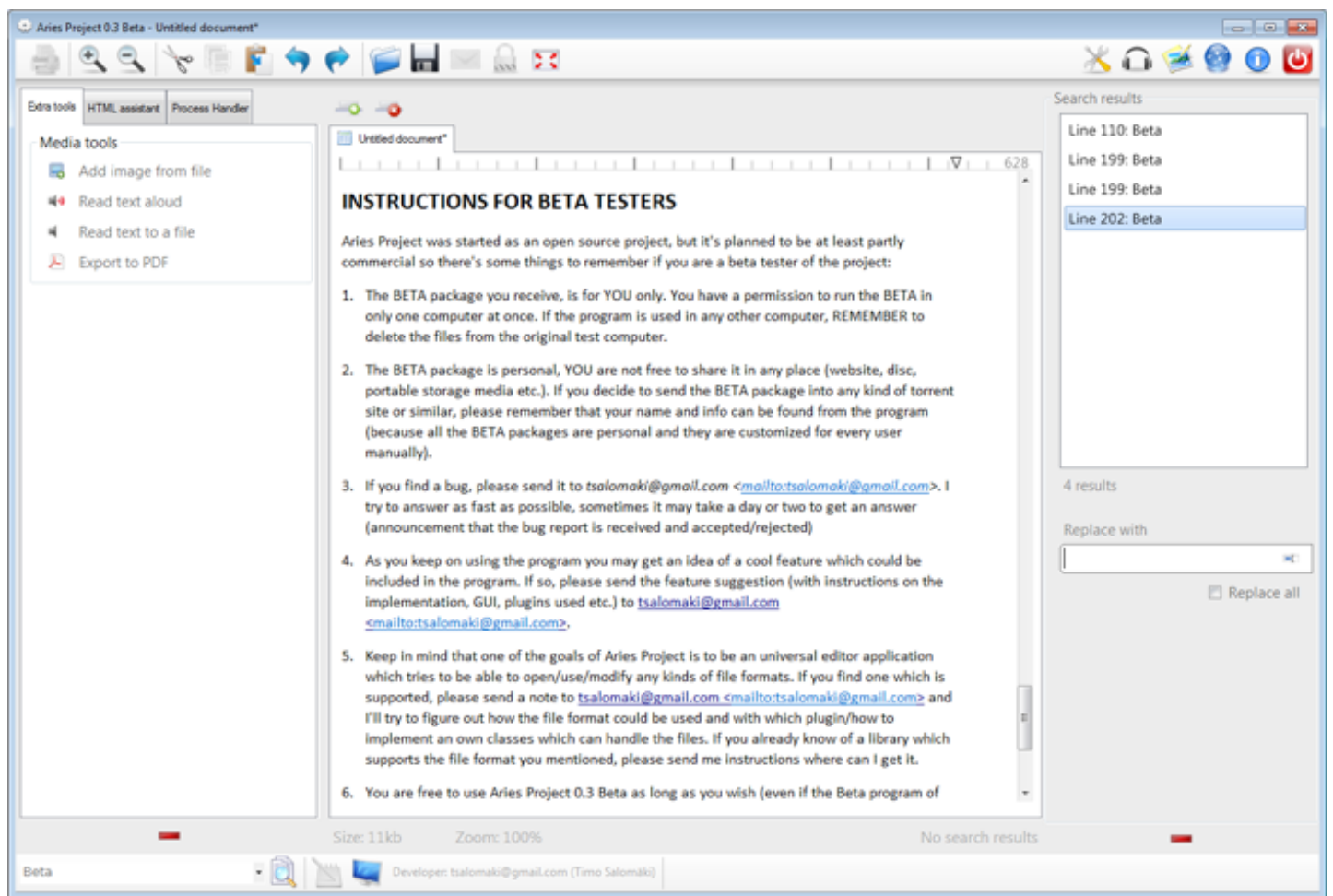# ARIES 0.3 BETA

Welcome to use the newest version of Aries Project, the ultimate editor program for Windows OS. The main idea is to provide an easy to use and feature rich application which replaces the need of other editor programs. In the newest version there's over 100 media file formats supported and more formats are supported as the development goes further. For example this version of Aries brings the support for Adobe Photoshop file format (*psd*) which is rarely supported in smaller image editors. Breaking changes also include a tabbed interface which lets users to modify dozens of documents at the same time with ease.

# NEW FEATURES

### *Tabbed interface*

*Aries Editor* uses tabbed interface to implement the multiple file editing feature. Tabs can be added and removed.

### *Margin control for the editor.*

The margin control imitates the margin control seen in *WordPad* and *Word*. Currently it has only a few features. The right margin of the document can be set by dragging and dropping the arrow to a desired point. Whenever the use drags the arrow, current margin can be seen on the right side of the control. If the mouse is hovered over the control, a transparent arrow is shown but the margin is not edited until the user clicks the control.

### *Default Margin property in settings*

The default margin can now be changed through the *Settings* -dialog. The margin is *831px* by default because it's an approximate width of an *A4* document.

### *Replace function for search feature*

Whenever the user searches for a specific string in a file, there's an option that one of the search result strings or all of them can be replaced with another string.

### *User's can now add an image to a document easily by selecting desired image file from the harddisk*

Add image feature allows users to select an image file from the harddisk and after selecting the program copies the bitmap into clipboard and calls the paste method of the document so the image is added to the document.

### Left side panel is now used for extra features.

On the left side of the form is a new panel which holds a tab control. Currently there's two tab pages: *Extra tools* and *Html Assistant.* Html assistant doesn't have any content in it, but it will have some web page analyzing controls in stable version (*0.3*). Extra tools contains four features:

1. Add Image From File
2. Read text aloud
3. Read text to wav
4. Export to PDF

Each of these features are explained in this document.

### Document text can be played aloud read by a woman's voice.

*Microsoft Speech AP*I is used to read the text aloud with a speech synthesizer. System.Speech namespace contains a *SpeechSynthesizer* class which contains a method called *Speak(string text)*.

### Text can be made bold, italic or underlined by clicking Control + B, Control + I or Control + U

This is a feature which is not implemented in default *RichTextBox* control in *.Net Framework* so it has to be done separately. Whenever the user clicks a keyboard's key, *KeyDown* event is fired and the program checks if one of the mentioned key combinations is typed.

### The default margin of the document is set to 831px which is an approximate size of A4 paper. The red mark in the margin control is located at 831px.

This is not so important because the document is still saved without mentioning the location of the right margin. All in all the user might want to see how wide the standard *A4* document is and how the text should be formatted to fit the content into *A4* page.

### Aries Image has now rotation effects (Clockwise and CounterClockwise)

These functions are included in *ImageEffects.cs* file. The implementation is basically very simple. *System.Drawing.Bitmap* class contains *RotateFlip()* method which is used for rotating the image.

### The image modified with Aries Image can be imported to a document currently edited

When the new instance of *ImageViewer* (*Aries Image*) form is created, the *Owner* property is set to *this.* It means that the *Aries.cs - which is the class that creates a new instance of ImageViewer.cs -* is the owner of the ImageViewer class. Because of that the *Aries Image* can call public methods from the *Owner* class. In this case the method which is called is *addImageFromAries()*. Before calling the method *BitmapToAddFromAries* should be populated with a bitmap which is then imported in the editor.

### If the user opens the html file it's either shown in Aries Web or edited in Aries text editor

*OpenFile* mehtod automatically detects if the program is opening a file format which can have some special actions. *Html* file format (*.htm and .html*) is one of them. The dialog asks user if the document should be opened in Aries Web or Aries Editor. If the user chooses Aries Web it's still possible to open the file in editor through an *Open In Aries* button in Aries Web.

### The opened website can be opened and analyzed in the editor

Always when the new document is finished downloading in *Aries Web*, the *LastDocument* property is set to hold the document just downloaded. Later when the user clicks *Open In Aries* button, the program sets *OpenInEditor* property to true. When the *Aries Web* is closed, the parent form (*Aries.cs*) checks the *OpenInEditor* property and if it's true, it opens the document located in *LastDocument* property in the Aries Web class.

### The textdocument can be read to a wav file with a few format options

*Microsoft Speech API* is used to provide this functionality. Before calling the *Speak* method of the *System.Speech,* program has to set the output to a specific wav file (which is then created) using *SetOutputToWaveFile* method. *Aries* also lets user to choose some options which define the quality of the exported wave file.

### Aries Image now uses FreeImageNET project for some of the image effects.

*FreeImageNET* is an open source project located in *sourceforge.net.* It contains many fast and well working image manipulation algorithms. The methods used are *Rescale, Invert, AdjustBrightness, AdjustContrast, GetHistogram* and *GetChannel* (*spaceholder, not used in Aries 0.3 Beta*).

### Image's can now be resized in Aries Image through an ImageResizeDialog.

When the user clicks *Resize Image* button in *Toolbox* of *Aries Image* new instance of the *ImageResizeDialog.cs* is created and shown. After the dialog is closed the program checks if the user wanted to continue the resizing effect (*bool ResizeImage*). If the value is set to false, the resize effect is not used. If true, the program checks for the new size (*int Width* and *int Height*), defined in the *ImageResizeDialog.cs*.

### Aries Image can now be opened through the main window.

This is just a new *ToolstripButton* in the main *ToolStrip* of the *Aries Editor*.

### Supported image formats are now Bmp, Tga, Cut, Dds, Exr, G3, Gif, Hdr, Ico, Iff, J2k, Jng, Jp2, Jpg, Koa, Mng, Pbm, Pcd, Pcx, Png, Ppm, Pgm, Psd, Ras, Sgi, Tiff, Wbmp, Xbm and Xpm

*FreeImageNET* is an open source project located in *sourceforge.net.* It contains many fast and well working image manipulation algorithms. The mentioned image file formats are supported by the library. It means that the *Aries Image* can open that kind of images and they can be saved in any of those formats.

### A simple text document without any special elements can now be exported to PDF using iTextSharp

*iTextSharp* is an open source project and a *.Net* wrapper of the popular *iText* project. It provides rich functionality for creating *PDF files*. The project can be found from *sourceforge.net*.

### Fullscreen mode is now properly implemented in the editor

When the user enters the fullscreen mode, some toolbars are hidden and the *FormBorderStyle* is set to *None.* There's also an *ExitFromFullscreen* button shown in the *toolstrip* which is used for *Add Tab* and *Close Tab* buttons. When the user exits the fullscreen mode, all the hidden toolstrips are shown and the *FormBorderStyle* is set to *Sizable*.

### Aries Player plays videos using QuickTime ActiveX plugin.

This feature requires the QuickTime to be installed on the user's computer. If it's not installed, Aries Player won't work (in future versions there will be numerous *Video Player* plugins which extend the count of supported media formats and if one is missing, there many be another on the user's computer and then the Aries Player will work).

**70 media file types supported by Aries Player: vfw, ulw, swa, sml, smil, smi, sd2, qt, qcp, mqv, mpv, mpm, mov, m75, m4p, m4b, m3url, m1s, m1a, m15, kar, gsm, fli, flc, dv, dif, cel, cdda, caf, bwf, amr, mc, ac3, mpg, avi, wav, snd, mpeg, mpa, mp4, mp2, midi, mid, m4v, m4a, m3u, m1v, au, aiff, aifc, aif, adts, ac, 3gpp, 3cp2, 3g2, sdv, rgb, mp3, 3gp, mac, pnt, pntg, pct, pic, pict, qti, qtif and smf**

The support for these formats is provided by QuickTime ActiveX plugin. If it's not installed on users machine, there's no support for those file types.

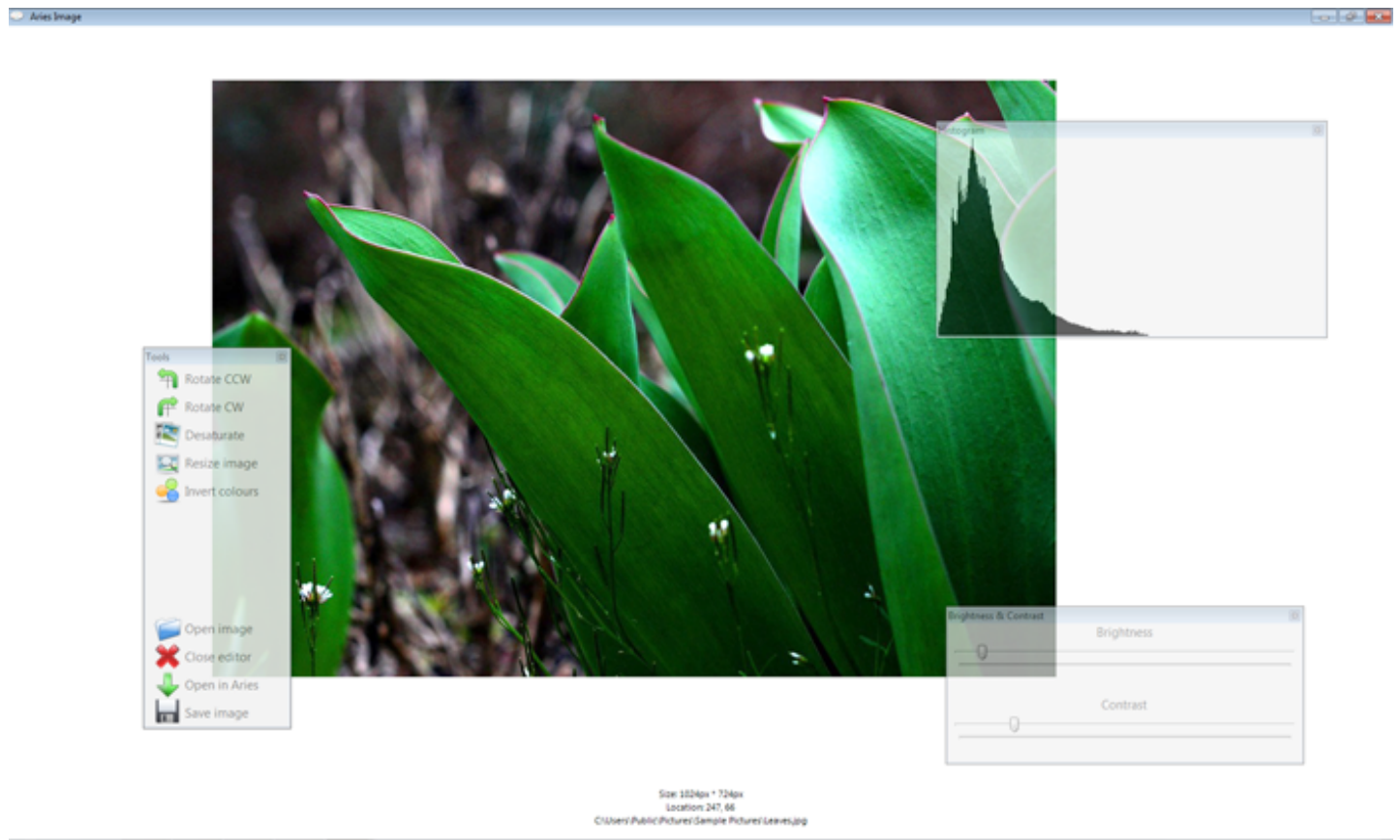**Aries Image uses floating tool windows so the image area is the whole form.**

All the tool windows in *Aries Image* have the *Owner* property defined (*AriesImage = ImageViever.cs*). It means that the window's can call methods from the owner class, so the image can be edited through windows. *FormBorderStyle* of the window's is set to *FixedToolWindow* and the opacity is *85%* (*0.85*) by default.

**Aries Image has a tool window which shows the histogram of the image currently opened (realtime)**

This feature uses *FreeImageNET's GetHistogram()* method to get an integer array which represents the histogram values. They are passed to *AriesImageHistogram.cs* window which passes them to *HistogramDrawer.cs* which then renders out a bitmap which graphically shows the histogram of the image currently edited.

# ARIES IMAGE

Aries Image is a little but very handy and useful image editor integrated into Aries Editor. If the user opens an image file which is supported by Aries Image, it's directly opened in Aries Image and the user can later import the image into a document (There's a faster way to add images to a document by clicking the Add Image From File button in Extra tools panel). Aries Image uses FreeImageNET library for some of the effects and for image file format support. By default .Net Framework has only a few file formats supported so FreeImageNET brings dozens of new formats to Aries Image.



As you can see, there's currently three dialogs. The first one on the left side of the form is toolbox which contains the tool buttons. By clicking them the user can modify image, or close the editor, save the image and import it to the editor's document. The second form on the right (on the bottom) is Brightness & Contrast dialog which can directly be used to modify those values of the image in realtime (nearly). The last dialog on top of the form is a histogram dialog which graphically shows the histogram of the image.

# ARIES PLAYER

Aries Player is used for playing media files. It supports about 70 file formats because of the underlying QuickTime ActiveX plugin. Aries Player is in early alpha and it will support more file formats and it'll have more features in future.

# INSTRUCTIONS FOR BETA TESTERS

Aries Project was started as an open source project, but it's planned to be at least partly commercial so there's some things to remember if you are a beta tester of the project:

1.      The BETA package you receive, is for YOU only. You have a permission to run the BETA in only one computer at once. If the program is used in any other computer, REMEMBER to delete the files from the original test computer.

2.      The BETA package is personal, YOU are not free to share it in any place (website, disc, portable storage media etc.). If you decide to send the BETA package into any kind of torrent site or similar, please remember that your name and info can be found from the program (because all the BETA packages are personal and they are customized for every user manually).

3.      If you find a bug, please send it to *tsalomaki@gmail.com*. I try to answer as fast as possible, sometimes it may take a day or two to get an answer (announcement that the bug report is received and accepted/rejected)

4.      As you keep on using the program you may get an idea of a cool feature which could be included in the program. If so, please send the feature suggestion (with instructions on the implementation, GUI, plugins used etc.) to tsalomaki@gmail.com.

5.      Keep in mind that one of the goals of Aries Project is to be an universal editor application which tries to be able to open/use/modify any kinds of file formats. If you find one which is supported, please send a note to tsalomaki@gmail.com and I'll try to figure out how the file format could be used and with which plugin/how to implement an own classes which can handle the files. If you already know of a library which supports the file format you mentioned, please send me instructions where can I get it.

6.      You are free to use Aries Project 0.3 Beta as long as you wish (even if the Beta program of the 0.3 version has officially ended). There's no time limitations or any other limitations in the program so it will remain fully working. You must still remember that distributing the package is against the Beta program rules and the LAW.


That's it, now you are ready to try out Aries Project and it's wonderful set of features!
*Have a nice BETA EXPERIENCE!*




Timo Salomäki, *DudeDesign*
*April 13th, 2009*