

CalcCapture - Version 1.0

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CalcCapture is one more option for the capture of the screens of the emulators of calculators.

CalcCapture is the successor of VTI Capture. The program VTI Capture only worked together with the emulator VTI of Rusty Wagner with the original or none skins and it didn't work correctly in Windows XP. CalcCapture has the similar operation, where the main differences are in the new visual and in the possibility to configure the capture of the screens of other emulators.

The reason of the development of this program was my need to have a program to capture the screens of the emulators transforming the images in grayscale and putting borders in the images automatically. Those images I would put then in the page www.ti-cas-br.org that I was preparing, but for several reasons I had to abandon.

The program allows to captures the images using any skins of VTI or even without the skin.

I tested the program only in Windows XP and I don't know if the program will work correctly in other versions of Windows. If somebody had some negative result in the capture of the image, please enter in contact so that it can fix the problems.

The program can be installed (put) anywhere in the hard disk.

After the execution of the program, the following screen will appear:



NOTES:

CalcCapture comes with several pre-defined configurations of emulators. However the possibility exists of excluding the configurations already existent as well as the possibility to add new configurations.

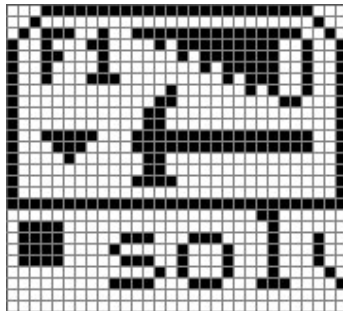
In this screen the selected configuration is the one of the emulator GtkTiEmu using the calculator TI-89.

If that emulator is not running, when trying to capture a screen, it will appear a message informing that the window of the emulator was not found.

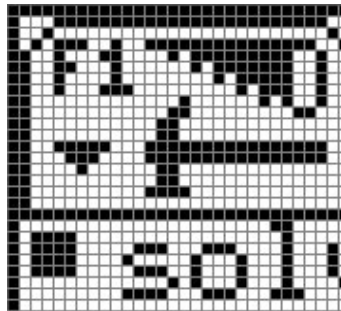
CalcCapture doesn't detect the running emulator automatically. It is necessary to configure the emulator, if the same is not still, and to select the name in the field "Emulator."

The standard image configuration is "GRAY WITH HIGH CONTRAST" and it cannot be deleted or altered definitively. This configuration can be altered temporarily, but it won't be recorded. To add new configurations, click on the button "New", alter the fields in "Image Configuration" and later click on "Ok". The saved configurations can be excluded clicking on the button "Delete".

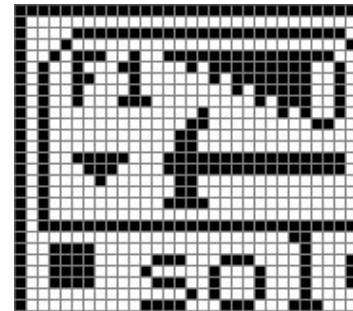
Three options exist for "Border". The first "Without" is the normal option of the other capture programs, in other words, in this case no border is added in the captured image. The second option "1 Border", does with that the program adds a border automatically in agreement with the color selected in the field "Outer". The last option is "2 Borders", that it adds two borders automatically, and the color of the first (the intern) it is the chosen color in the field "Inner" and the color for the border outside, it is the color that was chosen in the field "Outer".




Border : Without



Border : 1 Border
Outer : Black



Border : 2 Borders
Inner : White
Outer : Black

In the options "Inner" and "Outer" is possible to capture a color of the original image of the emulators, so that the same can be used in the borders. For this color capture, it is necessary that the user clicks in the button . After the user to click in this button, the program will change automatically to the tab "Images", where the user must selects a color clicking on some point of the image in "Image from Emulator".

In "Palette" it is possible to choose the option of colors of the adjusted image. The captured image can be adjusted to Black/White, Grayscale or the image can stay with the Emulator LCD color.

The user will also be able to select an option for "Dithering", where the usual is to use the option "Nearest".

The options of "Contrast", "Lightness" and "Darkness" are important for the adjustment of an image captured from the emulator with colored Skin, when using the grayscale palette.

The option "Invert" was added for the inversion of colors of the captured image.

In "Capture Type" can be chosen the option "Still Image" or "Animation", where this last option generates animated GIFs.

In it "Capture Interval" should be chosen a time for the interval of the captures of images. The value doesn't refer the "ms", because it depends on the computer and of the processing of the images. It is advisable that the user makes some tests to discover the best value, for the animation to be in agreement with the wanted result.

In "GIF Interval" it should be chosen a time for the interval in that the images in the GIF file will be changed.

NOTES:

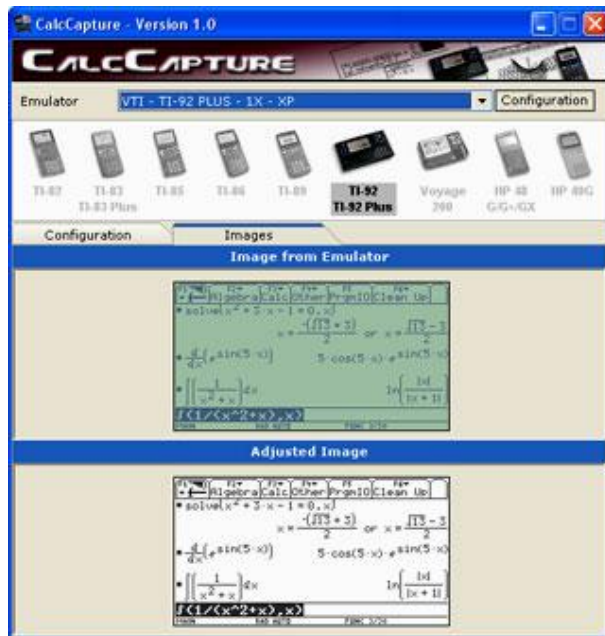
- The user can alternate the values doing with that the animation is faster than the own sequence of captured images, or the user will be able even delaying the animation.
- The users should make tests in browsers, because if the "GIF interval" goes very low, the browser will consume a lot of resource and the image will be slow with elapsing of the animation. The animation will correctly be able to appear in CalcCapture, but not in the browser.
- When beginning the capture of animations, in the right top of the screen a small screen will appear informing the number of captured images.
- It is not advisable to capture animations of TI-92/TI-92 Plus using the size 2x, because when using the size 2x, the computer it will be much slower and the capture of the images also.

The name of the file should be chosen in the field "Filename". The user can capture an image without having selected a file, and after having liked the result of the capture, to choose a file and to click in the image "Adjusted Image" to save, without the need of a new capture.

The option "Uses auto file name" will include sequential numbers automatically to the name of the file.

Example: If the selected name is C:\TEST.GIF, when capturing the first image, the file C:\TEST0001.GIF will be created, the second file will be C:\TEST0002.GIF and so on.

Below, the image of the tab "Captures":



NOTES:

In this case, an image of the screen of the calculator TI-92 Plus was already captured.

As the emulators uses almost all the keys in the keyboard (some internal functions), it was added only two options for the Hotkey. The first option is the key "PrintScreen" and the other is the key "NumLock". To capture an image or an animation using one of these Hotkeys, it is necessary activate them clicking in the button "Activate". To disable, it is enough to click again in this button, and that will have the name "Desactivate".

To capture an image, it is enough to click in the button "Capture". Also an animation can be captured clicking in this button and soon after having begun the capture, the name in the button it will change for "Stop Capture". After having clicked in the button "Capture", the program will begin the capture after a little less than 1 second. In this instant the program will emit a tone of high frequency in the speaker of the computer. If the program is configured to capture an animation, then the program will emit a tone with

the same frequency when finishing the capture (When the user presses the shortcut key or after pressing the button "Stop Capture"). When the program will finish the adjustments of the image, the same will emit a tone with a lower frequency.

As informed previously, the program will show the message "Image not saved!" if the user doesn't choose a file. To save the image already captured, the user should go to the tab "Configuration" and to choose the name of a file, and later to click on the image in "Adjusted Image" in the tab "Images".

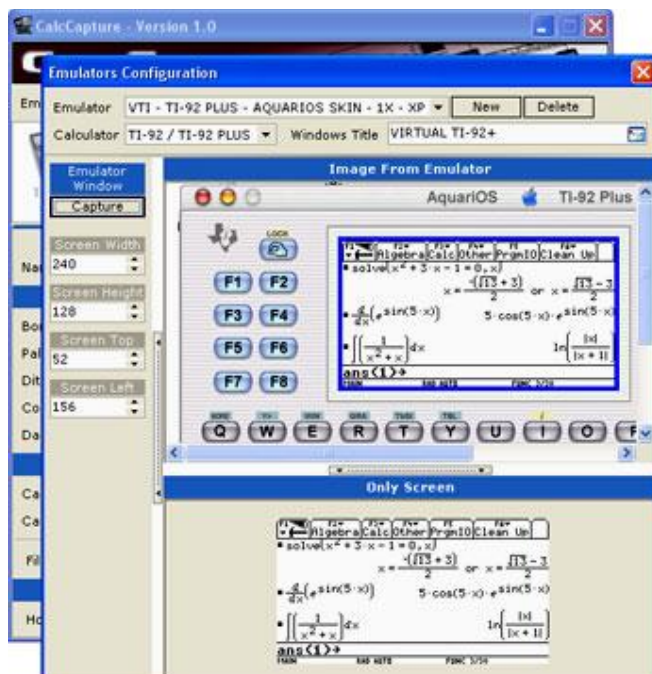
NOTES:

- It is advisable to use only the Hotkeys for capture of animations.
- If the program will capture an animation, the program will just put the first image captured in "Image from Emulator".
- The user can capture an animation with in the maximum of 3000 images in the total.
- When stopping the capture of a great animation, the program it will emit a tone informing that it finished the capture and it can delay to emit another tone informing that it finished adjusting. The program delay, because it will adjust the colors, it will compress the maximum so that the final file of the animation is not very big.
- Don't move the window of VTI Capture when it is capturing an animation.
- If the emulator captures an image of the emulator that it is using the size 2x, the dimension of the image in the file will be of 2x, in other words, the program won't decrease to the original size of 1x.
- If the program doesn't put the emulator window on the top, click in the emulator and use the shortcut key to capture the images.

To close the program, the user should click with the right button of the mouse on the program, and when appearing the popup, to select the option EXIT, or click in the small button "x" in the caption of the program.

To add other emulators or different skins, click in the button "Configuration" that is located in front of the field "Emulator" in the top of the program.

The following window will appear:



NOTES:

This image shows the configuration of Lalit Ghelani's skin AquariOS for the calculator TI-92 Plus using VTI.

To add a new configuration for any emulator, click first on the button "New". Select the calculator (Only for visualization of the image in the main window).

In the field "Windows Title", it is necessary to write the name of the title of the Emulator Window. So that it doesn't happen problems, execute the Emulator with the wanted Skin. Therefore after, click in the image that is in the end of the field "Windows Title", that will appear another window with the title of all of the visible windows of Windows. Seek for the name of the window in the emulator. In the example above, the name of the Emulator Window is "VIRTUAL TI-92+".

Now click on the button "Capture" to visualize the complete image of the emulator. Adjust the dimension and the position of LCD of the emulator using the fields "Screen Width", "Screen Height", "Screen Top" and "Screen Left".

After having made this configuration, click in the button "Ok" to record.

FINAL WORDS

If somebody has problems with the program, has some question or want to do some comments to the program or these text, please email me at:

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