<<GVIEW / GV>> ver. 0.61 Author: Tamotsu Tobita

NIFTY:PBC02026 TOBITA

NIKKEIMIX: tobita

Copyright (c) 1992,1993 by Tamotsu Tobita. All rights reserved.

Translation of the document: Masafumi Matsuda

NIFTY:PAG01265 (FQLD) PCVAN:BQJ68494 (QLD-SIG) CompuServe:74060,1265 Internet:matsuda@uthscsa.edu

This utility is a viewer of graphic files under the operation of MS Windows. You will find this very useful especially when you use a high resolution display.

GVIEW.ZIP contains GV.EXE, GV.HLP, README.JPN and README.ENG. README.JPN is the original documentation written by Japanese. If you have a DOS/V by IBM or a Toshiba T series personal computer with "JSYS", you can display README.JPN properly.

** GV.HLP is only for Japanese. English version is not ready.

>Features

A graphic file viewer on Windows

This program changes palettes, when viewing 16 color data file, on VGA (IBM-PC compatible) or on PC9801 by option.

Graphic formats include most prevalent graphic formats used in Japanese computer networks, including GIF and JPEG format.

Among them, you to enjoy real colors, even if you are using fixed palette environment like VGA or PC9801. (You know that under usual circumstances, 16 color palettes are fixed in Windows. However this program changes the palette.)

>CPU

This program was compiled by Borland C++ v3.1 using PC9821Ap. The operation was confirmed by the following computers: PC-9821Ap
IBM-PC compatible with VGA, SVGA
PC-9801RA2
J-3100 SGT
PC-H98
PS/55Z XGA
FM TOWNS model SF
under the control of Windows ver.3.0/3.1

>How to use

GV [<CPU option>] [/FP[+|-]] [/PG <Pager>] [/EXT=<TYPE>] [/ZM <ZoomRate>] [/AS <AspectRatio>] [/AA[+|-]] [/WD <DataDir>] [/ICON[+|-]] [/UC[+|-]] [/QT{-|={0|1|2}}] [/DT[+|-]] [/VI[+|-]] [/C={16|256}] [/ESC[+|-]] [/APT={W|H|I|D}] [/BMP[+|-]] [/AL[+|-]] [/OD[+|-]] [<DataFile>]

<CPU option>

```
{ /98 | /98N | /98E | /98E0 | /98EA | /GA | /VGA } 

<TYPE>
{ MAG | MKI | Q4 | JPG | GIF | PIC | XBM | X | BMP | ALL }
```

Please start this program from Windows. You may select options from the menu given by this program later. Also you may start this program associated with the graphic file by giving the name of <DataFile>. Pleases use <Data File> (name of the file) at the end of the options.

To make relations, please describe in WIN.INI in Windows as follows;

[Extensions]
GIF=GV.EXE ^.GIF

When you display the graphic data, you may use drag & drop feature. Drag the file from the file manager and drop on GV (icon).

>Graphic formats

- 1. MAG: MAKI02 format developed by Maki-chan NET
- 2. MAKI: MAKI01A, MAKI01B format developed by Maki-chan NET
- 3. Q4: Q4 format developed on PCVAN and NIFTY by the QLD-group
- 4. JPEG: JFIF format by JPEG
- 5. GIF: GIF format developed on CompuServe.
- 6. PIC: format developed by Mr. Yanagisawa for X68K (Sharp)
- 7. XBM: Bit map format used in X Windows
- 8. X: Modified XBM format developed by JUNET
- 9. BMP: Bit map format used in MS Windows 3.0 OS/2
- 10. Automatic mode: Identifying the format by the suffix shown above

Details of the display of the formats

MAG

Partial pictures are displayed as follows:

- 1) When no pictures are shown before the partial picture, it is shown normally.
- 2) When the number of planes of the color is different from that of the picture shown before, it is shown normally.
- 3) When the specified position is out of the range of the picture shown before, it is shown at the position where normally displayed.
- 4) When the size of data is more than 640 x 400, it is shown normally.
- 5) Otherwise, the partial picture data is displayed at the specified position on the previous picture as a mixed graphics.

Q4

BAT file included in the Q4 graphic data is neglected.

JPEG

JFIF data format is displayed.

This software is based in part on the work of the Independent JPEG Group.

GIF

GIF87a and GIF89a(one file one graphic only) formats are displayed. Basically GIF87a is the format that this program supports.

The Graphics Interchange Format(c) is the Copyright property of CompuServe Incorporated. GIF(sm) is a Service Mark property of

CompuServe Incorporated.

PIC

You can change the aspect ratio. This program supports the following types; 0x00/0x01/0x03/0x11/0x21/0x52/0xC2/0x0F/0X1F/0XFF and 16/256/4096/32K/64K colors. This program does not support partial display.

BMP

Depend on the window versions, the color shown might be different. (For example, NEC Windows and EPSON Windows even used on the same computer, give you different results.)

This program didn't correct these differences.

>Other features

Basically this program is only used to show the graphic data. This program doesn't support the picture format conversion. Besides this program can do more on graphics displayed.

- 1) Copy/Paste with Clipboard (DIB,Bitmap)
- 2) Data save using BMP format.
- 3) Multiple graphic data can be shown by drag & drop
- 4) Right or left rotation
- 5) Linked display with multiple graphic data (auto/manual)
- 6) Automatic window size adjustment
- 7) Information of comments on the graphics data
- 8) Display of the document file
- 9) Display of the information of environment

Copy/Paste

Copy to the clip board is based on the copy of both DIB and Bit mapped formats simultaneously. You may paste using DIB (prior) or Bit mapped formats.

Data Save by BMP

Number of colors will be the same number which you used to show data. When you want to save 256 colors using 16 color machine, you have to use 256 color, which is not beautiful.

Drag & Drop

You can select multiple files. Use left button on the mouse to show the menu.

Next Data:

Previous Data:

DATA List...:

Double click of the left button enable you to precede the file.

Rotation

Link

When you want to link the graphic data next to the picture already shown, you may use this feature. The size of the picture should fit to the size of the previous picture already shown. When you want to add the picture to the left side, you should remember that the horizontal size of the picture has limitation. You may use this feature especially when you display several Q4 formatted data files.

Auto adjustment of the size

To adjust the window size on the available screen size, you may use this feature. This feature is useful especially after the rotation or the movement.

Comment display

Information on the graphic data are shown. These include data size, number of colors and comments appeared in the header of the graphic file (header in MAG format, /*comment*/ in XBM format).

Document display

Document written on the DOC or Q4D file on the same directory can be shown using "notepad.exe" etc. (you may specify it.) When you link several graphics, the common part is used as the name of the document file.

>More options

I am sorry! You find the forbidden options that depend on the machines. 1) PC98(N) (/98, /98N)

When the graphic data consist of 16 colors (palettes) and are shown in the active window, palettes are chosen from 4096 colors. You should use this option when you use PC9801 and NEC Windows.

2) PC98(E.0) (/98E, /98E0)

When the graphic data consist of 16 colors (palettes) and are shown in the active window, palettes are chosen from 4096 colors. You should use this option when you use PC9801 and EPSON Windows ver.3.0. (The palettes used in EPSON Windows are different from those of NEC Windows.) 3) PC98(E.A) (/98EA)

When the graphic data consist of 16 colors (palettes) and are shown in the active window, palettes are chosen from 4096 colors. You should use this option when you use PC9801 and EPSON Windows ver.3.0A. (The palette used in EPSON Windows differ between the versions.) 4) GA1024i (/GA)

When the graphic data consist of 16 colors (palettes) and are shown in the active window, palettes are chosen from 16 million colors. You should use this option when you use PC9801 and GA1024i under fixed palette window driver.

5) VGA (/VGA)

When the graphic data consist of 16 colors (palettes) and are shown in the active window, palettes are chosen from 262144 colors. You should use this option when you use IBM-PC VGA.

(The color adjustment may not good in this version.)

6) OTHERS (default)

Under this default option, graphics data are shown dependent to the graphic driver used in the windows.

7) Fixed Palette (/FP)

The above modifications of palettes information are good only when the picture is in active window. However when this option is on, the information of palettes is good when the picture is not in active window.

Other options are good in every machine.

8) Pager option for document display (/PG<pager>)

Please specify the name of the program which is used to display the document file with path name. Default is "notepad.exe".

9) Setting the default file type (/EXT=<TYPE>)

```
This option determine the graphic data file type at the beginning of this
program. <TYPE> can be the format which this program support and ALL.
When you don't select this option, the <TYPE> is MAG.
10) Zoom option (/ZM <ZoomRate>)
from 10% to 999%
11) Aspect Ratio (/AS <AspectRatio>)
from 50 to 250
12) Auto aspect setting (AA[+|-])
for PIC format
13) Directory option at start (/WD <DataDir>)
assign the directory for data of GV
14) Icon option (/ICON[+|-])
Start together with ICON
15) Re-drawing option when non-active (/UC[+/-])
When this option is on and GV.exe is in non-active window, this option
forces the re-drawing of the picture by adjusting the colors as truly as
possible (Slow).
16) Reduction of colors (/QT{-|={0|1|2}})
- or 0 : no reduction
1: one pass
2: two pass
17) Dithering option (/DT[+|-])
18) Number of colors (/C={16|256})
If the number of colors assigned is more than the number of colors, there
is no reduction of colors.
19) Language option
usually use the information of WIN.INI
20) ESC key option to end GV (/ESC[+|-])
Please don't use ESC key During drawing.
21) Assign the aspect ratio (/APT={W|H|I|D})
W: adjustment of width to have a good aspect ratio.
H: adjustment of height to have a good aspect ratio.
I: adjust the aspect ratio to enlarge the picture.
D: adjust the aspect ratio to shrink the picture.
22) bit map option (/BMP[+|-])
Quicker format of the internal data. When - (off), you can save memory.
23) Image option on saving (/VI[+|-])
When you save the data, you use the same zoom and aspect ratio, if +.
24) Link option (/AL[+|-])
Automatic link taking advantage of the name of the file according to the
 following rules.
The program recognize the last one or two characters of the file name to
link the data file.
 RULES:
 UP-DOWN:
  xxxxU.ext + xxxxD.ext
  xxxxU.ext + xxxxS.ext
 UP-MIDDLE-DOWN:
  xxxxU.ext + xxxxM.ext + xxxxD.ext
```

```
or
  xxxxU.ext + xxxxM.ext + xxxxS.ext
 LEFT-RIGHT:
 xxxxL.ext + xxxxR.ext
 LEFT-MIDDLE-RIGHT
  xxxxL.ext + xxxxM.ext + xxxxR.ext
 2 x 2:
  xxxxUL.ext + xxxxUR.ext + xxxxDL.ext + xxxxDR.ext
  xxxxUL.ext + xxxxUR.ext + xxxxSL.ext + xxxxSR.ext
25) Document option (/OD[+|-])
You will see the document of the data and graphics at the same time
Initialization File:
You can also define the options using this file.
 Machine{ PC98 | PC98N | PC98E.0 | PC98E.A | GA1024i | VGA | Others }
 Pager=<name of the command for pager>
 Format={ mag | mki | q4 | jpg | gif | pic | xbm | x | bmp | ALL }
 Dithering={ ON | OFF }
 Quantize={ ON | OFF }
 QuantizePass={ 1Pass | 2Pass }
 Color={ 16 | 256 }
 CPU={ 286 | 386 }
 AspectRate=<50 - 250>
 AutoAspect={ ON | OFF }
 ZoomRate=<10 - 999>
 FixPalette={ ON | OFF }
 UpdateColor={ ON | OFF }
 Language={ Japanese | English }
 GaSwitch=<0 - F (GA1024i number for interrupt)>
 WorkDirectory=<name of directory for data files>
 PushESCExit={ ON | OFF }
 UseBMP={ ON | OFF }
 ViewImage={ ON | OFF }
Menu Command
(F)ile/
 (O)pen...: File open. You will see the dialog box.
 Save (A)s...: File save using BMP format. You will see the dialog box.
  When displayed by 256 colors, the BMP format is for 256 colors.
  When displayed by 16 colors, the BMP format is for 16 colors.
  When ViewImage is ON, the display image will be saved as it is.
 Save (C)onfig: save the present status to the initialize configuration file
 E(x)it: Exit from GV
(E)dit/
 (C)opy: copy the data to the clip board.
 Copy View(I)mage: copy the data as the image shown.
 (P)aste: Display the data in the clip board.
 Cl(e)ar: clear the data from the memory of GV.
 (A)utoResize: Resize the window to have the largest window.
 (Z)oom...: zooming of the data (10 - 999)
```

```
(R)otate/
    { (L)eft | (R)ight }
    Rotation of the data to left or right
 (L)ink/
    { (T)op... | (B)ottom... | (L)eft... | (R)ight... }
    Link the data toward the specified direction.
(I)nfo/
 (P)icture...: Information of the data shown
      size, comment etc.
 (D)ocument...: Display the additional information files
      DOC/Q4D/TXT files
 D(i)splay...: Information about the hardware of display.
(O)ptions/
 (E)nvironment...:
    Machine
             { PC98_N | PC98_E.0 | PC98E.A | GA1024i | VGA_16 | OTHERS}
         Please don't mistake to select the one you are using.
        286CPU
      When selected, 80386 commands will not be used to show JPEG file.
        Fixed Palette
      For PC98/VGA/GA1024i
        GA1024i SW
      I/O assignment for GA1024i
    Update Colors
      Re-display to make the color of the data same, using the palettes
      of the other window. This may slow down the operation.
        Push ESC->Exit
      ESC option on
        Language
      { (J)apanese | (E)nglish }
        Use Bitmap
      Use faster internal format.
 (Q)uantize...:
        Quantization :on or off
        Method: 1 pass or 2 passes
        Colors: number of colors used
        Dithering: on or off
 (A)spect Ratio...:
       Aspect Ratio (50 - 250)
        Auto Adjust to CG (PIC only)
 (D)ata Info...:
        Directory: data file
        Format: format assignment
        Pager: Pager to read the document
        Save View Image: Save option
(H)elp
HELP file is for JAPANESE USE ONLY in this version.
 (I)ndex...:
 (C)ommand...
 (H)elp usage...
 (A)bout GV...
>BUG
```

Please inform the bugs to the author.

>Limitations

Some features of this program have not been well tested. Please send the report to the author when you try them.

- 1. MAKI01B 8color 200line format
- 2. Auto judgment of CPU (286 or not)

This program does not paste the logical palettes. Therefore data exchange might be in failure, when the application does not copy the DIB to clip board.

The drawing speed of JPEG graphic data is a kind of slow (; ;).

>Modifications in the next version

The following modifications are under consideration for the next version. Please give the advice.

- 1. quicker depicting of JPEG graphic data (if possible)
- 2. PI format (please give me more information, too m(o)m)
- 3. RGB, Q0 format support
- 4. PICT format support
- 5. TIFF format support
- 6. Auto-continuous display by timer
- 7. Display of the data using the whole screen
- 8. GIF89a format (especially for comment)
- 9. Modification (sharpness, darkness etc.) or adjustment or correction of the data
- 10. Utilization of Icon
- 11. Script
- 12. Format auto identification by the header of the data

>COPYRIGHT

Please keep the following instructions:

- Don't change the copyright information. The author, Tamotsu Tobita, reserves all rights. Mr.OB and Mr.YUIPO in Yamagata Univ. also have the copyright of GV.HLP. Mr.PAO is the copyright holder of ICON of GV.exe.
- 2) You can freely distribute this software by BBS. However you should keep in mind the followings:
- a) Distribute as the original is.
- b) Don't forget to distribute the document together. When you redistribute this program, I will appreciate your notice.
- c) Don't ask any money for this software.
- d) If you want to distribute this software for the commercial purpose, please contact the author before.
- 3) The author is not responsible for any damages caused through the usage of this program. Therefore it is your responsibility to use this program. The author dose not have any responsibility to fix the bug. The author does not have any responsibility for version up.

>Acknowledgment from the author

I really appreciate Mr.Woody RINN who kindly showed me the documents of MAG and MAKI format (MAGBIBLE, MKBIBLE). Without these documents I could not start to make this program. Please distribute this program to MAKI-chan NET.

Thank you for the GIF87 documents made by Mr. Shindou (SHU). This document is really a comprehensive explanation of GIF format.

Mr. YUIPO was kind enough to help me to test palette manager.

The information of Q4 format is obtained from XLD45.exe (XLD45.c) written by MAJYO. Thank you for this information, Mr. Yuuichi (SYSOP of FQLD1 in NIFTY SERVE).

I thank Mr. Yanagisawa for his publication of PIC format.

I would like to express my thanks to those who contributed the information of bugs and suggestions in FGALAV, FQLD and FWINF forums, especially to the people in QLD forum (FQLD).

Please give the author the information of the bugs or advises. I would like to develop better version of this program.

Tamotsu Tobita NIFTY:PBC02026 TOBITA NIKKEIMIX : tobita

>Environment for development PC-9821Ap(memory 8MB) GA-1280A(high resolution board) CR-5500

MS-DOS ver.5.00A MS-Windows v.3.1 (NEC) Borland-C++ v.3.1 WXII-Win V1.16 FJ editor v.0.99d WXII+ v.2.52

>History of modifications (version up)

V0.61 1993/08/20

Drag& Drop for multiple files Re-Draw of the selected file

Japanese Menu

Auto Link

Document display with the picture

Image save / copy

Next file by left mouse button (double click)

Document display by right mouse button (double click)

PIC format (0x01:88VA/8Bit,0x0f:8Bit)

PIC format (8/4 bits)

PIC format (0x21:88VA/8Bit) and Drag&Drop

To return to standard palette during menu selection in 98 option.

Cannot escape during the loading of the data. Quit from the hang up during large JPEG display.

Bug Fix: aspect ratio in PIC

Bug Fix: UseBMP Bug Fix: BMP

V0.60a 1993/07/02

Support PIC(X68K) 4bit format (0x00)

Aspect ratio option Saving memory option

Correction of the aspect ratio setting when rotation

ESC option

Bug Fix: reduction of color

V0.60 1993/06/13

Color reduction was supported in all the formats.

Support no reduction of color

PIC(X68K) support

Support Drag & Drop for MS-Windows 3.1

Menu -> title (loading status)

option method and save method changed

+/- option and numeric option support

initialize file format modified

Palette change inactivated when the operation of ICON

Bug Fix: JPEG 0 comment data

Bug Fix: MAG partial saving and method of calculation

Bug Fix: Window size during rotation

V0.59d 1993/05/21 (closed)

not clear the screen when drawing

TXT files were accepted as document file.

Bug Fix: MAG format (lines)

Bug Fix: BMP paste

Bug Fix: for the file name with Chinese characters

Bug Fix: Drag & Drop in MS-Windows 3.1J

V0.59c 1992/12/14

Data directory

GIFs with MAC header were accepted.

Bug Fix for GIF format

V0.59b 1992/12/13

Loosen the rule for MAG

More GIF formats were supported

V0.59a 1992/11/25

Bug Fix: ending

V0.59 1992/11/15

Help file

BMP file save (officially)

Drag & Drop support

Dialog box for file open and file save

Comment display for JPEG

More options (ICON, ZM, AS)

Bug Fix: link and cancel

Bug Fix: Scroll and re-draw when Zoom, Aspect rate other than 100.

Bug Fix: Q4, MAG, 200LINE MAKI file

Bug Fix: directory

V0.58x 1992/09/07 (test version)

Improvement of JPEG display speed.

Add "Japan" to the language selection

GA1024i I/O address switch option added.

Return to normal display mode on the modification of the size of

maximized window.

BMP file save

Bug fix: directory

Bug fix: VGA

V0.57a 1992/08/13

Bug fix: assignment of file, when starting up.

V.0.57 1992/08/05

fixed some bugs of options

V.0.57 1992/07/23 TEST version for USA CIS

added the feature of enlargement and shrinking of the picture

English mode

adjusted to the initialization file

correction of the aspect ratio

added more formats of JPEG which can be displayed

switches to Japanese/English mode according to WIN.INI information

auto-decision of 286CPU

Default of full color machine became Others

consideration of non-preemptive multitask (in part)

fixed the bug which reserved wrong spaces for display of Q4 info.

V.0.56a 1992/07/01

fixed bugs of menu check

fixed bugs of command line option input

V.0.56 1992/06/27

added JPEG format

added VGA option

added the option to change the data type at the beginning

added the feature to link graphics

improved to display Q4 format using RGB palette file.

added to display more information on Q4 format (date and RGB file information)

added OS/2 bitmap format

improved the acceptance of the name of document files at the multiple graphic display using link option.

fixed the bug that occurred at showing some Q4 files.

fixed the bug that could not set the name of the document file when data file was pointed

fixed the bug that occurred at the rotation of the picture which had odd number of line or row.

V.0.55a 1992/06/03

added the option for EPSON Windows ver.3.0A

V.0.55 1992/06/01

added Q4 format

added link feature

added and improved the auto adjustment of window size and its algorithm

partial GIF89a display enabled

added the feature to read documents

added the feature to re-draw the non-active windows

improved the timing to change the logical palette

improved the menu structure

fixed the bug that occurred when XBM file does not have cr at the end.

V.0.54 1992/05/12

completed the action with palette manager

added MAKI format

added the option for EPSON Windows (PC98(E)) officially

added the PC98 palette options

added the feature that adjust the window side

changed the name of window to show the file name instead of GV

added the CPU information with MAG data

fixed the bug that induced malfunction to show MAG file without comments

fixed the bug that displayed wrongly the partial picture of MAG

fixed the bug that skipped to read extended block of GIF file

fixed the bug that worked wrongly with interlaced GIF file

fixed the bug that occurred with 8 color files

fixed the bug that calculated the wrong size of bit map size

V.0.53 1992/04/11

accepted GIF87a graphic format

enable to display partial save MAG graphic data fixed the bug with 8 color display of MAG again.(_o_). fixed the bug that hide the files without archive attributions changed the timing of the change of PC98 palette at the multiple graphics display added the option for GA1024i added the option for EPSON Windows (PC98(E)) tested the palette manager V.0.52a 1992/04/05 fixed the bug that erase the comments at rotation. fixed the bug that took the wrong number of the palette with PC98 fixed the bug with 8 color display of MAG digital graphics V.0.52 1992/04/03 fixed the bug that kept open the resources added the capability of rotation to left/right V.0.51 1992/03/31 added PC98 options sending DIB and logical palette information to clip board V.0.50 1992/03/20 First version