Image File Utilities

Image File Utilities is group of SuperBASIC extensions for the creation and conversion of disk and microdrive image files as used in QL emulators.

There are one or two routines used, from the SMSQ/E (version 3.16) source code by Tony Tebby (see licence notice at the end of this document)

Installing the SuperBASIC extensions
To load the extensions, load the driver into memory and call it.

example: i. **LRESPR flp1_ImageUtil_cde**
           ii. **x=RESPR(4294)**   {if you don't have Toolkit 2, or equivalent}
             LBYTES flp1_ImageUtil_cde,x
             CALL x

An installation message, and a version number will be displayed in #0

MAKE_MDI
MAKE_QLAY
MAKE_MDUMP1
MAKE_MDUMP2

These commands will create blank formatted Microdrive image files for use with the MDI device driver, or the Qemulator and the Qlay, QL emulators.

The Qemulator images can be created in both the Mdump1 and Mdump2 formats.

The optional sectors and random number parameters allows you to define the number of sectors that will be available in the image file, and the random number that will be stored in the sector headers.

syntax: *medium_name := name | string_expression* {maximum of 10 characters}
sectors := numeric_expression {100 to 255, default 255}
rand_number := numeric_expression {0 to 65535}

MAKE_MDI *filename*, *medium_name* [,*sectors* [,*rand_number*]]
MAKE_MDUMP1 *filename*, *medium_name* [,*sectors* [,*rand_number*]]
MAKE_MDUMP2 *filename*, *medium_name* [,*sectors* [,*rand_number*]]
MAKE_QLAY *filename*, *medium_name* [,*sectors* [,*rand_number*]]

example: i. **MAKE_MDI flp2_myfiles_mdi,Games**
{creates a MDI image file named 'myfiles_mdi' on flp2_,
With a medium name of 'Games', with 255 Sectors, and
with a system generated random number}

ii. **MAKE_MDUMP1 flp1_Work1.mdv,Data,216**
{creates a Qemulator Mdump1 image file named
'Work1.mdv' on flp1_, With a medium name of
'Data', 216 Sectors, and with a system generated
random number}

iii. **MAKE_QLAY dos1_test.mdv,"demo",221,1234**
{creates a Qlay image file named 'test.mdv' on dos1_, With a medium
name of 'demo', 221 Sectors, and a random number of 1234}

Note: Qemulator Mdump2 images are created by later versions of the Mdump utility for converting Microdrive cartridges to image files. For the Qemulator user there is no noticeable difference in the use of either image type. The ability to to create both types is supplied for completeness.

MAKE_FLP

The **MAKE_FLP** command will create a blank formatted floppy disk image file.

The density parameter defines the size of the disk image to be created.

        s - Single density, 360K, 720 sectors
        d - Double density, 720K, 1440 sectors
        h - High density, 1.4M, 2880 sectors
        e - Extra density, 3.2M, 6400 sectors

syntax: *medium_name* := *name | string_expression*   {maximum of 10 characters}
           density := *name | string_expression*   **{s | d | h | e}**

        MAKE_FLP *filename*, *medium_name* ,*density*

example: i. **MAKE_FLP win2_myfiles_img,Games,d**
                    {creates an image file named 'myfiles_img' on flp2_, With a medium
                     name of 'Games', and 1440 Sectors}

           ii. **MAKE_FLP win1_Work1_img,Data,s**
                    {creates an image file named 'Work1_img' on flp1_, With a medium
                     name of 'Data', and 720 Sectors}

CONVERT2_MDI
CONVERT2_QEMU
CONVERT2_QLAY

The three commands **CONVERT2_MDI**, **CONVERT2_QEMU**, and **CONVERT2_QLAY**. Allows for the conversion between different Microdrive Image file formats as used in QL emulators.

The commands will try to identify the image file type you are converting from and if it has any problem converting from one format to another, or you attempt to convert an image file, to one of the same type, then you will receive a Format Failed error.

Image files converted to Qemulator format with the **CONVERT2_QEMU** command will be in the mdump version 1 file format.

If you convert copy protected microdrive images, There is no guarantee that the copy protection will survive the transfer. The conversion routines my miss some exotic copy protection techniques.

syntax: **CONVERT_xxx** source*imagefile* **TO** *destinationimagefile*

example: i. **CONVERT2_MDI "dos2_quill.mdv" TO win2_quill_mdi**
                {converts a QLay, or Qemulator image named 'quill.mdv', to a MDI
                 image named 'quill_mdi'}

            ii. **CONVERT2_QEMU win1_backup_mdi TO "dos4_games.mdv"**
                {converts a MDI, or Qlay image named 'backup_mdi', to a Qemulator
                 image named 'games.mdv'}

comment: If the command has any problem converting from one format to another, or you attempt to convert an image file, to one of the same type, you will receive a Format Failed error.
There may also be a half generated file that will need to be deleted.

Copyright and Disclaimer

These commands should not cause any problems, damage, or loss of data. However you use them at your own risk, and I do not accept responsibility for any damage, or loss of data. You should always only work on copies of important image files.

The code also contains portions of the SMSQ/E source code

Licence for SMSQ/E

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