MacSND

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COLLABORATORS

	TITLE : MacSND		
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REVISION HISTORY

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MacSND

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                         xDM – Extended Disk Masher System V1.3

          Original concept by Adam Chapman
       Updates done by Dirk 'Dirkie Irkie' Vael
                   Public Domain

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1.2 Introduction

Wanna waste less bandwidth when sending some disks to your friends by
modem,~or use less disks to store all those precious disk archives ?

> No problem, I hear you say, use LZX by Data Compression Technologies.

But what if the disks are non-DOS ? (like megademos, or trackdisk-games)

> DMS ???

Come on, DMS sucks for more than one reason... (speed, stability, ratios)

> LZX ???

Nope, LZX doesn't support disk-archiving (yet? Come on Jonathan!)

> xDM (eXtended Disk Masher) ???

Yes!!!!, because xDM supports AmigaDOS and non-DOS disks. If necessary,
it's~also possible to compress MS-DOS disks, or whatever other filesystem you
are~using, as long as it's supported by your system. Before you start
shouting~"Yahoo!", read the docs VERY carefully 8-(

xDM combines the DMS method for disk i/o and the superior compression
technique of LZX for packing.

All this is put together in an 100% AmigaDOS (3.x) compliant script file,
so~you lamers can stop whining that "my system uses that specific weird
hardware and~xDM doesn't work with it...". Moreover, multitasking is fully
available (although~that's more some nice theory rather than the hard
reality)

All you got to know is which processor (680x0) you have (for the LZX~program),
but that can't be too hard to know, not ?   If you don't know which processor
you use, I wonder how a moron like you got this program in the first place ...
;-)

1.3 Installation

                Hum, the hardest part of these docs...

1. First of all, copy the executables called
        'dd'
        'PackDev'
        'LZX' (000 or 020 version)
   to your C: directory (or a directory which is assigned to C:)

Note: LZX is not included in this archive, see Aminet (util/arc).

2. Now copy the xDM script (the mainfile) anywhere you like. You can do this
by dragging the xDM MagicWB icon anywhere you like. Make sure 'IconX' is
present on your system.

3. Then place >MY< 'RAD' DosDriver in the same directory where xDM is. If you
wanna use HD archives, double the number of cylinders (to 0-159) by change the
cylinder numbers in the .info file (click icon once and select 'information'
in your Workbench menu) Make sure you've got plenty of RAM for this.

It is NOT necessary to mount RAD before starting xDM, the program will take

care of this =)

4. Save the xdm ENV-file in your ENVARC: directory, and in the ENV: directory
too, if you don't wanna reboot your system before testing xDM.

!!!

This 'xdm' file contains the default xdm-path, and can be changed to anything.
Just make sure that the path ends with a slash (= /) or problems may occur.
If the xdm environment file cannot be found, the default T: temporary dir will
be used. Since this directory is mostly found in RAM:, people with little ram
(e.g. vanilla A1200) can have "out of memory" troubles. See more in the

                troubleshooting
                 section.

!!!

5. Copy the all the docfiles to wherever you want, but they aren't required by
xDM itself.

6. Ready to go - Take off!

!!PS!!: if you wanna use other filesystems (e.g. MS-DOS or PFS) to crunch,
make sure you install MFS, available on aminet. More info in the (small) MFS
archive. MFS is a must have, whether you use xDM or not.

1.4 How 2 Use

                Since most of the program is self-explanatory, I'll do most of it ←
                   pretty
short, except the alien-filesystem stuph...

1. Click the icon   ;-)

2. Select whether you wanna mash or decompress disks

3. If you choose decompress, select the device you want to decompress to

   3.1. Choose an archive from the default xDM archives directory

   3.2. Let xDM do the rest

   3.3. If you're decompressing an old archive, xDM will still display
        the current written sectors, but this will not appear anymore
        when using xDM 1.3 archives

4. If you choose compress, thing get a bit more complicated   8-(

   4.1. Choose the device you wish to compress

   4.2. Choose your archive name and path

   4.3. Then the trickiest part of xDM appears... an intelligent question!

>>> Is the disk using an alien filesystem? (Y/N) <<<

When do you click 'YES' ?

If you're about to compress an not supported filesystem-disk, or
simply an Amiga-disk which combines AmigaDOS and trackdisk.

When do you click 'NO' ?

If the disk is standard AmigaDOS, MSDOS, PFS, etc. or totally
trackdisk.

For you people you cannot understand the Chinese in 4.3., click

>here<
4.4. xDM reads the disk and smashes it to a sometimes little ←
tiny archive

IMPORTANT: YOU CAN ALWAYS ABORT THE PROCESS PRESSING CTRL-D WHEN THE XDM
WINDOW IS ACTIVE

1.5 Hints

It's 4 o'clock in the morning, and xDM must be uploaded today, so I'll be
short in hints (sorry, folks!)

1. If you intend to use MS-DOS, PFS, diskspare or whatever strange filesystem,
make sure you have MFS (on aminet: util/disk/misc or something) installed. xDM
will always look for DFx: or RAD:, and MFS merges all alien filesystem-device
(PCx:, DSx:, etc.) in DFx:. For more info, read the docs with MFS. The latest
version of MFS, currently available on aminet, also works fine with
CrossDOS6.

2. Wanna use xDM in CLI ? Ok, just type 'execute' in front of xDM13

so: 1> execute xdm13

3. Wanna use xDM in DOpus 4.x ? Fine. Make a button with following
parameters:

 button name: xDM (or whatever)
 new entry -> type: Workbench -> browse through path and select xDM13
 stack = 4000, priority = 0, close delay = 0
 set no flags, except 'run asynchronously'

Now you can start xDM straight from DOpus.

4. No more hints (I'm gettin' tired)

1.6 **Troubleshooting**

1. Out of memory

solution1: make sure the xdm - environment file (in ENV: and ENVARC:) is
present and contains a path that points to your harddisk

Three examples of xdm file contents are:

    Work:archive/

    Sys:s/

    Sys:MyOwnDir/PiratzSuX/

solution2: buy extra ram (it's worth every penny)

2. I can't decompress my xDM image

Why?: probably wrong format of destination device

examples: highdensity 1760K disk (FFS/INTL) decompressed to 880K disk
             MS-DOS disk decompressed to Amiga-disk

use High-density disk or try inserting a blank MS-DOS disk (autoformat option
omitted, because it eats time and is in 99% of the cases not necessary)

Other reasons: maybe executables or devices got corrupted -> reinstall at
once!

3. My decompressed image doesn't work, although all files are present on disk

reason: Disk was coded by lamers!   (VERY RARE (0.5% chance))

They use the bitmap (or BAM = Block Allocation Map) of the AmigaDOS disk, but
add a few files using the trackdisk.device, so you can't detect these files
using a directory utility or whatever. Some megademo's are coded this way,
but also silly protected disks can have this protection. I remember (in the
old days) that Xenon I was like this. The disk seems to be totally empty
(856K free), but uses a bootblock loader to boot it's hidden data. Otherwise,
an awesome game called FirePower had also a hidden file, but this file was
included in the BAM of the disk, so you could easily answer "NO" to the
alien-filesystem question in xDM when packing this disk.

See also docfile of PackDev for more info on this.

Solution: Use the alien filesystem option to get all data in your archive
(it's the safest way to make sure you're archive is 100% ok)

Problem: If your disk contains 100K, and 500K is deleted just before
archiving, xDM will have to pack 600K of data when the alien-FS-option is
chosen. This is because the deleted files are still present on the disk, but
not in the bitmap. If the alien-FS is not chosen, only 100K will be
processed, resulting in a lot smaller archive, which is still 100% ok!

Final note on this: normally, you'll never need to enable the alien-FS option
with Amiga disks. Thank you.

PS: for those who don't know: trackdisk disks are mostly disks that use the
bootblock to startup (demo's and games) and cannot be installed on harddisk or
in ram.

1.7 Known Bugs

Not exactly another edition of "Bugggggggss in Speeeeeezzzzz", but I have
already found 3 bugs, which I can't help to solve, because they are the result
of stupid usage of xDM.

Here goes number one:

when you're trying to create an archive of which the name already exists, LZX
will refuse to add the new archive into the old one. It's not really a bug,
but still it's annoying for those lamers... :-/

And here goes the second one:

when you're trying to decompress an archive into a device which differs in
size from the orginal disk, xDM will not decompress the image, but will still
say that the process is completed, without really telling ya that something
went wrong (i.e. "stront aan de knikker" ;-). Anyway, look carefully, and
you'll see that 'dd' is reporting it couldn't open a device... It's a bug in
'dd' (return value wrongly set). Be careful!

Finally, the last cockroach is:

once, my RAD device messed up, and I couldn't compress nor decompress anymore
using the ramdrive. I suggest you give the command 'remrad' and reboot to
repair this quirk. This error occured after I tried several times to force xDM
to decompress an HD 1440K MS-DOS disk into an 880K ramdisk. (bug testing!)

1.8 Author

The author, Dirk Vael, just finished his studies in Applied Economics at the
university of UFSIA, now doing a post-academic year called 'Master of Business
Administration' (MBA), also at the university of UFSIA, Antwerp (Belgium).

My hobbies: none of your business! (but it isn't hard to notice them)

I can always be contacted~at~the~following adresses:

internet (preferably):

* till september 1995:

te900078@beta.ufsia.ac.be

* from october 1995 on:

mb900078@beta.ufsia.ac.be

If you're having trouble to reach my address, try this one:

hi910097@beta.ufsia.ac.be~(which~is~the~account~of~another Amiga-freak
called~Frank~Verheyen)

and ask him where the hell I am, he'll surely know... 8-)

snail-mail:

 Dirk Vael
 Merellaan, 33
 B-9060 Zelzate
 BELGIUM (Europe)

telephone:

<int.~access~code>-32-9344-7196~and~ask~for~Dirk~(but~most~of~the time I'm not
there~...)

Replies within 7 days, if not sooner (I promise!) I will reply to everything,
even flames, but then excuse my rude language ... >:^)

1.9 Crap

XDM IS PUBLIC DOMAIN, AND CAN BE USED AND SPREAD FREELY. (I'll skip the legal
crap)

ANYBODY MAY SPREAD IT, EXCEPT THOSE MONEY HUNGRY (AND *VERY* EXPENSIVE!!!)
AMIGA-DEALERS FROM BELGIUM CALLED 'CLICK', LOCATED IN WILRIJK, BECAUSE THEY
CONSTANTLY REFUSED TO HELP ME WITH MY THESIS. THEY ALSO RIPPED ME OFF FOR $10
WHEN I ORDERED TWO FRED FISH DISKS (SOME TIME AGO), WHICH TURNED OUT TO BE THE
WRONG DISKS TOO! I HEARD MANY COMPLAINTS ABOUT MANY AMIGA-FOLKS OUT HERE, ALL
ABOUT THE SHAMELESS RUDE 'SERVICE' THOSE SUCKERS HAVE. ROTT IN HELL! IT ARE
SUCH GUYS WHO RUIN THE AMIGA-IMAGE. IGNORE THEM!

Ok, sorry I lost my temper for a moment >;-)

//**//

Dirkie's funny config:

A4000/040, 2+8 MB RAM, 420 MB HDD, CD-ROM, 2 x 1.76MB internal diskdrives, 1 x

5.25" disk drive, 1 x 3.5" 880K diskdrive, A1438 multisync, OS 3.1, HP LJ 4L
printer

very soon additions to this A4k (aug'95):

 - CyberStorm 060/50 (yyyyeeeeeessssssss!!!!!!!!!!straight from the US of A)
 - CyberSCSI-2 with large SCSI-2 harddisk
 - perhaps a Pinnacle Micro RCD-1000 recordable CD-player (wow, finally I'm
   gonna get all my awesome and precious groovy garage vinyls on CD, mixed
   by myself ofcourse)
   Still unsure if Amiga-software is available... :-(
 - Toccata or Maestro Soundcard (for the audio recordings and mastering)

later additions will be the CyberVision64 4MB gfx card and the MicroVitec
A1564 monitor, but that's for '96, I'm afraid.

This A4000 serially linked with A500, kick 1.3, 1 MB (for old games only, I'm
afraid!)

Other machines:
 486SX40 desktop 4MB ram, 160 MB HD (old but necessary evil, I guess)
 486DX66 portable 4MB ram, 350 MB HD, colour display (a cute machine!)
 Psion 3 256K with extra worksheet flashcard (funny thing, but 3a is cooler,
Marc)

//**//

Thanx must go to the following Amiganoids:

1. Frank Verheyen (hi910097@beta.ufsia.ac.be) Keep programming, dude!

2. Tim Groenwals (tgroenwa@zorro.ruca.ua.ac.be) and the guys of HCC Antwerp -
Amiga division for helping me with my 412pp (!) university thesis about the
Amiga system... Any enquiries about this thesis (in dutch) are welcome
ofcourse!

3. Adam Chapman (for his truly excellent xDM v1.0)

4. Jonathan Forbes for the awesome LZX program. Come on guys, get registered
now, it's worth every penny of it!

5. Bruno Costa for 'dd' (bruno@impa.br)

6. the Amiga store 'Hirsch & Wolf OHG' (in Germany) for excellent prices and
service (Vielen Dank!)

7. Oliver Hitz (oliver.hitz@unifr.ch) for his LJ4-Boost proggy

8. Christian Wasner for PackDev (crisi@blackbox.shnet.org)

9. Tony Windey for beta-testing, remarks and much more...

10. Tim Stalmans for bug-reporting (tim_stalmans@metnet.demon.co.uk)

11. The rest of the Amiga-community (including the magazines), except the

lamers :-/

12. My brother Luc Vael, a London-based lawyer, for the awesome 'Kiss FM'
tapes he sends up regularily. Garage music rules!!! Thank you Paul 'Trouble'
Anderson, Steve Jackson, and all DJ's spinning the groovy 'tech-funk' tunes
from Chicago and NY every day.

13. Tommy Vandaele, my partner in crime, along with Rikske Verlinde and
Koentje Verschueren : the message reads "De kut en eure kliek zal ons nie te
pakken krijgen" Oh yeah, and I cannot forget sweet Viki & Gitta for their
charming company in Antwerp! To be continued... ;-)

14. Ruby & Viete, for being cool anyway...

//**//

WANTED: has anybody out there a PD program which creates maps for an old
(1987) Amiga game called 'FirePower' (a gorgeous tank battle game from 1987,
still working on my A4000/040 & OS3.1 & alle caches on (wow! clean
programming!)) I know it exists, but it's very hard to find... The guy who
finds this program will rewarded VERY generously!

//**//

And remember guys: Wintendows95 (written by Mr. Godot (= Bill 'Wates') from
Mickeysoft) SUCKS! See if 24th of August is the real deal, or just a fart...
If only Beavis and Butt-head reviewed Windows along with 'wooz' Bill Gates...
that would be cool... huh huh huh ... yeah ...

So long, dudes

<EOF>

1.10 History

version 1.0

 written by Adam Chapman, found on Aminet

 - cool, but too many bugs, and only few options

version 1.1

 never released

 - added few options (loop script, 4 disk-drives available)

version 1.2

 major update, found on Aminet

  – added rad-disk option
  – removed bugs when cancelling filerequester
  – removed bugs when something 'unexpected' happened
  – removed stupid rawdisk-handler, replaced it with dd
  – optimised LZX options
  – window configured
  – MagicWB icon added

version 1.3

  – removed dd, replaced it with excellent PackDev
  – supports multifilesystems
  – autodetects multifilesystems
  – faster compression/decompression
  – added bitmap-check to clear unused blocks
  – made xDM backwards compatible
  – added Amigaguide docs (they are needed, really!)
  – now looking in default xdm path

to do (future plans):

  – enhanced version for registered LZX users
  – device support (for xdm'ing whole partitions!!)
  – more rad-drives usable at same time (if anyone needs that, gimme a sign)
  – ...??? tell me!