Xtruder

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COLLABORATORS

	TITLE : Xtruder		
ACTION	*NAME*	*DATE*	*SIGNATURE*
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REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

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Xtruder

1.1 Xtruder guide

```
Xtruder
*******

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1.2 About Xtruder

This program is SHAREWARE and you're only allowed a 2 week evaluation
period. If you want to use Xtruder beyond that period you must register.

                    How to register

This is yet another viruskiller but in quite a different vein than
the majority. The main aim with Xtruder is to stop the spreading of
vira through bulletin boards.

Xtruder requires Kickstart 2.04 or higher.

```
It needs the following versions of libraries:

reqtools.library      v38+  -  ReqTools is Copyright (c) Nico François
unpack.library        v39+  -  Library made by Thomas Neumann/SHI
removelink.library    v32+  -  Library made by Johan Öhman/SHI
Bootblock.library     v3+   -  Library made by Johan Eliasson/SHI
FileID.library        v6+   -  Made by BLOODROCK of SYNDICATE


and the following must be placed in L:

Bootblock.brainfile         -  Used by Bootblock.library
```

When you start Xtruder you will either see the GUI or nothing! If you
don't see anything it's because you have configured it not to popup at
start. See General preferences for more information.

It will of course load the preferences, paths and rexx prefs files if
they are available.

When Xtruder "sleeps" it will still be aware of the time check and
ARexx scripts can also still be executed.

1.3 About SHI

If you   know a virus programmer you can get a reward of $ 1000 for
supplying his name and address. The fact is that the law punishes data
crime very severely. (5 years in jail in most countries).

We are an international group with more than 250 members who have started
trying to stop the spreading of vira. Let me give you some examples:

        1. Our motto is: "Safe Hex", who dares do anything else today?".
        2. A virus bank containing all well known virus killer programmes.
        3. We help people to get money back lost by virus infection.
        4. We write articles about virus problems for 8 magazines.
        5. We release the newest and the best virus killers around.
        6. We have more than 20 "Virus Centers" worldwide where you
           can get free virus help by phoning our "Hotline", and the
           newest killers translated in your own language at very little
           cost.
        7. We hope that you can see how important your support is too,
           if you are using one of the following programs, which are
           actually using our anti virus libraries:

                * Virus Checker by Johan Veldthuis

                * Virus Scanner by Gabriele Greco

                * Fides Professional by John Lohmeyer

                * Fides Checker by John Lohmeyer

* D-Copy by Stefan Bernbo

* X-Copy APRIL '93 by Cachet Software (commercial)

* Disk Ute Copy by Alchemy Software.

* MT-Copy by Gert-Jan Strik, is doing a file- and
  boot virus check while you are copying disks and
  is extremly fast too... supprised?

Please send new viruses because without YOUR SUPPORT TOO,
we can't stop the future virus spreading!

For more information contact:

        SAFE HEX INTERNATIONAL   (Please send a "Coupon-Response
        Erik Loevendahl Soerensen   International" and a self addres-
        Snaphanevej 10   sed envelope, if you want infor-
        4720 Praestoe   mation about SHI by letter).
        Denmark

        Phone: +45 55 99 25 12
        Fax: +45 55 99 34 98

1.4 Legal stuff

When there in the following is refered to Xtruder it implies the files
in this distribution.

Xtruder is copyright © 1994 Martin Wulffeld. All rights reserved.

Xtruder may not be modified nor disassembled in any way! Doing so is
illegal.

Xtruder may not be used for commercial purposes without a written
permission from me. Ie distributing Xtruder on a coverdisk is strictly
forbidden without my permission.

You may distribute Xtruder as long as all files are accompanied it and
no more than a reasonable copying fee is charged, but no more than US $5.
Xtruder may be packed with lha or similar archiver as long as the files
are not modified by it.

Xtruder has been tested on several machine configurations and has proven
to run fine on those, but I the author, Martin Wulffeld, cannot be held
responsible for ANY damage the Xtruder package might have inflicted to
your system due to bugs or misuse!

If you want to see future development on Xtruder you have to register.

 How to register

1.5   How to register

To register, send me an errorfree doubledensity disk and US $15, DM 25,
£10 or 100 DKr. Cash is prefered.

Fill out the registrationform which is included in the Xtruder archive as
'Xtruder.regform' and mail it to me.

This version of Xtruder has not been crippled but future versions might
be if the donations are few. Therefore I might make a key file.
If I do so all those who registered before the key file was made will
of course be able to get their key file. Just send a disk to me and
I'll forward a keyfile with the newest version of Xtruder back to you.

NOTE NEW EMAIL NUMBERS:

* Snail mail: Martin Wulffeld
                  Fredensvej 14
                  4720 Præstø
                  Denmark

* Fidonet: 2:236/12.1 (Preferably use this one)
                  2:236/116.14

* Amynet: 39:141/12.1

1.6   Features

    * A commodity
    * Supports newlook menus
    * Able to unpack almost any cruncher type
    * Check for vira within archives
    * Check specified paths every n minutes and handle vira without
      any user interaction at all
    * Save bootblocks as binary for later use
    * ARexx port
    * 99% keyboard controllable
    * Configurable to skip already checked files
    * Time check
    * Locale support (WB 2.1 or higher)
    * Works with MultiUserFileSystem (AFAIK ;)

1.7   CLI Usage

Xtruder has a small but efficient CLI interface. The template is:

P=PATH/K,F=FILE/K,Q=QUIT/S

The arguments have the following meaning

P/PATH   - The path to check
F/FILE   - The file to check. File is treated as uncrunched.

```
Q/QUIT        - Quit Xtruder after checking path/file
```

1.8 Menus in Xtruder

```
About...
Hide
Quit

Load ARexx scripts...
Save ARexx scripts...
Install ARexx script...
<script names>

Clear...
Show...
Save...

Paths...
General...
Check...
Save...
```

1.9 Project menu - About...

Well... surprise, surprise! Information on Xtruder will be shown.

1.10 Hide

Choosing Hide will hide the graphical appearance of Xtruder. You can then press the defined popkey and it will reopen it's GUI.

NOTE: When the GUI is hidden the timed check is still active and ARexx
      script can still be executed.

1.11 Quit

I just don't feel like explaining this right now :-)

1.12 Load ARexx scripts

Choosing this will pop up a file requester with the default name for the ARexx script file. But you can of course choose an earlier saved script file.

After having loaded the commands they will appear in the ARexx menu.

1.13   Save ARexx scripts

Choosing this will pop up a file requester with the default name for the
ARexx script file. You can of course choose another name for the scripts
but upon startup ONLY the ARexx script file 'S:Xtruder.rexxcmds' will be
loaded.

1.14   Install ARexx script

First a little requester will appear asking you to enter a number which
corresponds to the item in the ARexx menu where this script will appear.
Upon pressing return or 'Okay' yet another requester appears. Here you can
have to write the filename of the rexx script. Fx 'xtruder/chkpaths.rexx'.

The filename will appear in the menu and when you select the script it
will be executed.

1.15   Execute ARexx script

Executes the ARexx script installed in the chosen menu.

1.16   Clearing log

Clears the log buffer.

1.17   Show log

Shows the contents of the log buffer.

1.18   Save log

Saves the contents of the log buffer. Pops up a file requester where you
must choose a filename.

1.19   Paths preferences

Here you will see a list of the paths which you check with   All Paths
or then again maybe nothing at all. Anyway choose 'Add Path' and a path
requester pops up. Choose Okay and the path you selected will be shown in
the list.

To remove a path just select one and press 'Remove Path'. Easy? Yep!

To save the paths (instead of choosing them over and over again) press
'Save paths' and they will be saved to 'S:Xtruder.paths'.

1.20   General preferences

```
 Log file
 Write to log buffer
 Cx Popkey
 Popup at start
```

1.21   General preferences - Log file

A filename for the log buffer. When you first select Save... this
name will be used to save the log! If a file with that name exist a
filerequester will request you for a new name.

1.22   General preferences - Write to log buffer

Whether you want to write to the log buffer or not!

1.23   General preferences - Popkey

Your popkey! Default popkey is 'control lamiga x'.

1.24   General preferences - Pop up at start

If you want to hide Xtruder when it is started just deselect this check
box gadget. Ideal for BBS users who doesn't want Xtruder to pop up but
just stay in the background.

1.25   Check preferences

```
 Unpack path
 Virus path
 Virus comment
 Virus rename extension
 Custom BB
 Do if virus found
 Do if virus copied
 Time check
 CPB flags
 Set CPB Flags
```

```
 Check files with CPB
 Auto deprotect
 Decrunch files
 Extract archives
 Check dirs recursively
 Safe delete
 Auto check disks
 Auto read bootblock
 Show bootblock
 Quiet time check
```

1.26   Check preferences - Unpack path

By default this string gadget contains 'RAM:Unpack'. This path must be present for Xtruder if you will be able to decrunch files or extract archives.

Upon startup Xtruder will try to find this path and if it doesn't exist Xtruder will ask you if it should be created.

1.27   Check preferences - Virus path

By default this string gadget contains 'RAM:Virus'. This path must be present for Xtruder being able to store infected files.

Upon startup Xtruder will try to find this path and if it doesn't exist Xtruder will ask you if it should be created.

1.28   Check preferences - Virus comment

By default this string gadget contains 'This file is a virus or has a virus linked to it'.

This is the comment that automatically will be used when Xtruder finds a virus and Do if virus found or Do if virus copied has been set to 'Comment'.

1.29   Check preferences - Virus rename extension

By default this string gadget contains '_VIRUS'.

If you have set Do if virus found or Do if virus copied to 'Rename' this is what will be appended to the virus:

Example:

A file 'BadBoy' would then be renamed to 'BadBoy_VIRUS'.

1.30   Check preferences - Custom BB

By default this string gadget contains nothing.

The filename of a custom bootblock.

1.31   Check preferences - Do if virus found

You have the choice between the following:

```
Enfeeble
Delete
Rename
Comment
Copy
Move
Request - Enfeeble
Request - Delete
Request - Rename
Request - Comment
Request - Copy
Request - Move
```

1.32   Do if virus found/copied - Enfeeble

Simply removes the executable bit from the protection flags of the
infected file so it can't be started.

1.33   Do if virus found - Delete

Deletes the infected file/archive.

1.34   Do if virus found/copied - Rename

Appends the Virus rename extension to the infected file/archive.

1.35   Do if virus found/copied - Comment

Comments the infected file/archive with Virus comment

1.36   Do if virus found - Copy

Copies the infected file/archive to the Virus path .

1.37   Do if virus found - Move

```
Copies the infected file/archive to the  Virus path  and then
deletes the original!
```

1.38   Do if virus found/copied - Nothing

```
Quite tricky this one .-) Does absolutely NOTHING!
```

1.39   Do if virus found/copied - Request -> Enfeeble

```
Simply removes the executable bit from the protection flags of the
infected file so it can't be started.
```

1.40   Do if virus found/copied - Request -> Delete

```
Deletes the infected file/archive.
```

1.41   Do if virus found/copied - Request -> Rename

```
A request for a name for the infected file pops up. This name will NOT
be appended to the old name!
```

1.42   Do if virus found/copied - Request -> Comment

```
A request for a comment pops up where you can write a string of max 80
characters.
```

1.43   Do if virus found - Request -> Copy

```
Copies the infected file/archive to the  Virus path .
```

1.44   Do if virus found - Request -> Move

```
Copies the infected file/archive to the  Virus path  and then
deletes the original!
```

1.45   Check preferences - Do if virus copied

You have the choice between the following:

```
  Enfeeble
  Rename
  Comment
  Nothing
  Request - Enfeeble
  Request - Rename
  Request - Comment
  Request - Nothing
```

1.46   Check preferences - Time check

If set to 0 minutes there will not be an active time check but as soon as
you change this value to something higher than 0 and leave preferences
Xtruder will try to set up a time request and notify you if it succeded
in doing so. Every time you change the value Xtruder will abort the current
time request and set up a new one.

1.47   Check preferences - CPB flags

CPB stands for 'Checked Protection Bits'. These flags are used for
identifying files which have already been checked. Put in another way: If
a file has the flags specified here and   Check files with CPB is
off, that file will be skipped! Ideal if you have a lot of lha archives
which has been checked before.

1.48   Check preferences - Set CPB flags

CPB stands for 'Checked Protection Bits'. Will set the CPB flags
specified if a file was succesfully checked.

1.49   Check preferences - Check files with CPB

If set, files with the Checked Protection Bits flags will also be checked.
Ideal when you get a new version of removelink.library which knows more
vira.

1.50   Check preferences - Auto deprotect

If a file is protected from reading you can set this option and it will be
deprotected.

1.51   Check preferences - Decrunch files

```
Set this to decrunch files. Very handy indeed :-)
```

1.52   Check preferences - Extract archives

```
Set this to extract lha archives. Remember that ALL files within the
archive will be decrunched or extracted if they can be!
```

1.53   Check preferences - Check dirs recursively

```
Set this if you want to enter sub-directories.
```

1.54   Check preferences - Safe delete

```
When an archive has been extracted it either takes up memory or HD space.
Therefore the extracted files in the  Unpack path  will be deleted.
This can be done without user interaction at all but if you set this
option you will be asked before Xtruder starts deleting!
```

1.55   Check preferences - Auto check disks

```
If set, Xtruder will check any inserted disk as a normal path. Ie no need
to fumble with the gadgets if you need to check your whole disk collection
for vira.
```

1.56   Check preferences - Auto read bootblock

```
If set, Xtruder will check any inserted disks bootblocks.
```

1.57   Check preferences - Show bootblock

```
If set, Xtruder will show the checked bootblock on the screen.
```

1.58   Check preferences - Quiet time check

```
If set, Xtruder will not ask you if it should commence checking
specified paths. Ideal if you run a BBS and want to check your uploads
every hour or so.
```

1.59   Save preferences

Save preferences to 'S:Xtruder.prefs'.

1.60   Gadgets in the main window of Xtruder

```
Check
Bootblock
System
Miscellaneous
```

1.61   Check menu

```
All Paths
Single path
Bootblock
Memory
```

1.62   Check All Paths

This function is mainly for BBS use but can of course also be used by the
general user. To use this function you must first specify some paths which
you want to check regularly. This is done in Paths... . Pressing All Paths
will then automatically check all the paths you have specified.

During a scan of a directory a little window pops up in the right side of
the screen with 4 gadgets named:

```
Stop
Pause
Next
Skip
```

E.g.: If a file is being decrunched and you press 'Stop' Xtruder will
      first stop when this file has decrunched and checked.

Pressing 'Pause' will pause the scanning and wait until you press it
again.

If you have set Check dirs recursively Xtruder will enter sub-directories
and check them as well. Otherwise only the files in this directory will be
checked.

If Xtruder finds a virus there is a number of different actions which can
be carried out. These actions are discussed in Do if virus found .

If a lha archive is encountered and you have lha in C: this file will be
extracted to the Unpack path , and all files within
this archive (crunched programs/other archives) will be unpacked/extracted

too. When the archive has been extracted succesfully or unsuccesfully the
unpack path will be checked.

It's a good idea to make lha resident. This will reduce the time spent
checking archives.

When a scanning of a directory is performed the number of files encountered
will be written in the action window. Files in an archive are not counted
though (they will be soon :-)

1.63   Control menu - Stop

Aborts the whole scan.

1.64   Control menu - Pause

Pops up a requester informing you of your pausing and waits for you to
continue.

1.65   Control menu - Next

'Next' will jump to the next path you specified in Paths... .

1.66   Control menu - Skip

If you have entered a sub-directory with hundreds of sources and wish to
skip it press Skip!

1.67   Check a single path

Does what it says actually. Pops up a requester where you select the path
you want to check, and then checks it.

1.68   Check a bootblock

A window will pop up with 4 gadgets containing the possible drives (DF0 -
DF3). Those which you do not have are ghosted eg disabled. Choose a drive
and another window will pop up with 9 choices of bootblocks to install. The
first 8 are from the bootblock library and represents the standard types of
bootblocks. The last one (Custom BB) is a custom bootblock taken from the
the Custom BB in preferences.

1.69   Check the memory

Checks the memory via the removelink library and kills any vira it might have found.

1.70   Bootblock gadgets

```
   Install
 Save  bin
```

1.71   Install a bootblock

A window will pop up with 4 gadgets containing the possible drives (DF0 – DF3). Those which you do not have are ghosted eg disabled. Choose a drive and another window will pop up with 9 choices of bootblocks to install. The first 8 are from the bootblock library and represents the standard types of bootblocks. The last one (Custom BB) is a custom bootblock taken from a file. You can set the filename of the custom bootblock in check preferences.

1.72   Save a bootblock as binary

A window will pop up with 4 gadgets containing the possible drives (DF0 – DF3). Those which you do not have are ghosted eg disabled. Choose a drive and the bootblock of the drive will be read. If everything wen't okay a filerequester pops up. Choose a file or write a name in the filename gadget and the bootblock will be saved.

1.73   System gadgets

```
  Libraries
   Devices
  Resources
    Tasks
```

1.74   List of libraries

A window pops up showing all the libraries currently loaded to memory.

1.75   List of devices

A window pops up showing all the devices currently loaded to memory.

1.76 List of resources

A window pops up showing all the resources currently loaded to memory.

1.77 List of tasks

A window pops up showing all the waiting tasks.

1.78 Miscellaneous gadgets

```
Delete
Rename
Makedir
Comment
Execute

Type

Type
Unpack
Check

Bootblock
File/Link
Crunchers
```

1.79 Delete a file

You might want to delete a file once in a while (I do :) so just use this function.

1.80 Rename a file

In case you want to rename a file to something completely different.

1.81 Create a directory

Want a new unpack path? Just create one with this function.

1.82 Comment a file

You just found an archive with a virus, and want to comment it! Well then this function will come in handy! If a file already has a comment it will be in the string gadget.

1.83   Execute a command

Well, if you want to execute something like an external memory checker you
could use this function.

1.84   Identify files in a path

Identify files in a path! Their filetypes will be written to the window
but if you have set Write to log buffer they
will also be written to the log buffer!

1.85   Identify a file

Have you always wondered what that darn certain file was? Well, then you
can use this function to identify it.

1.86   Unpack a file

Unpacks the file you select to the Unpack path .

1.87   Check a file

Checks the file you select for file/link virus.

1.88   List of known bootblock vira

Will simply show those bootblock vira which are known to the bootblock
library's brainfile!

1.89   List of known file/link vira

Will show those file/link vira which are known to the current version of
removelink library!

1.90   List of known crunchers

Will show the types of crunchers which are known to the unpack library!

1.91   ARexx commands

As you probably know Xtruder has an ARexx interface. The address of the
Xtruder ARexx port is 'XTRUDER'.

These are the commands:

```
 GETFILE
 GETPATH
 CHECKALLPATHS
 CHECKPATH
 CHECKCLEANUP
 CHECKFILE
 CHECKMEMORY
 CHECKBOOTBLOCK
 INSTALLBOOTBLOCK
 UNPACKFILE
 CLEANUP
 SHOWGUI
 HIDEGUI
```

1.92   ARexx command - GETFILE

```
NAME
      GETFILE - Get a filename

SYNOPSIS
      GETFILE <pathname>

FUNCTION
      Request the user to select a filename from the filerequester.

INPUTS
      pathname    - NOT required but if pathname is present it will
                      be set in the filerequester.

RESULT
      name        - Will return whatever that was in the path gadget with
                      the filename appended to it.

      0           - If the user selected 'Cancel'.
```

1.93   ARexx command - GETPATH

```
NAME
      GETPATH - Get a path from the filerequester

SYNOPSIS
      GETPATH <pathname>

FUNCTION
      Request the user to select a path from the pathrequester.
```

```
INPUTS
      pathname     - NOT required but if pathname is present it will
                     be set in the filerequester.

RESULT
      name         - Whatever in the path string gadget.

      0            - If the user selected 'Cancel'.
```

1.94   ARexx command - CHECKALLPATHS

```
NAME
      CHECKALLPATHS - Check spefied paths for vira

SYNOPSIS
      CHECKALLPATHS

FUNCTION
      Checks the paths you have set in  Paths...  for vira.

RESULT
      0 - n        - How many vira that were found.
```

1.95   ARexx command - CHECKPATH

```
NAME
      CHECKPATH - Check a path for vira

SYNOPSIS
      CHECKPATH pathname

FUNCTION
      Checks a path like  All Paths .

INPUTS
      pathname     - A fully qualified pathname.

RESULT
      0 - n        - How many vira that were found.

      -1           - If it couldn't find 'pathname'.
```

1.96   ARexx command - CHECKCLEANUP

```
NAME
      CHECKCLEANUP - Check unpack path and delete afterwards

SYNOPSIS
      CHECKCLEANUP
```

```
FUNCTION
     Checks the unpack path and then deletes all files within afterwards.

INPUTS
     pathname    - A fully qualified pathname.

RESULT
     0 - n       - How many vira that were found.

     -1          - If it couldn't find 'pathname'.
```

1.97   ARexx command - CHECKFILE

```
NAME
     CHECKFILE - Check a file

SYNOPSIS
     CHECKFILE filename

FUNCTION
     Checks a file to see if it is a virus or has one linked up to it.

INPUTS
     filename    - A fully qualified filename.

RESULT
     1           - If it is infected.
     2           - If it is clean.

     0           - If it couldn't find 'filename' or load the file perhaps
                   due to low memory.
```

1.98   ARexx command - CHECKMEMORY

```
NAME
     CHECKMEMORY - Check memory for vira

SYNOPSIS
     CHECKMEMORY

FUNCTION
     Checks your memory for vira and kills those that were found.

RESULT
     1           - If your memory was infected.
     2           - If your memory was clean.
```

1.99   ARexx command - CHECKBOOTBLOCK

```
NAME
      CHECKBOOTBLOCK - Check a disk bootblock

SYNOPSIS
      CHECKBOOTBLOCK unit

FUNCTION
      Checks a bootblock and determines via the Bootblock.brainfile if
      it's a known virus or not.

INPUT
      unit         - The drive unit ranging from 0 to 3 (DFx:).

RESULT
      0            - Not a virus
      1            - If it's a virus.
      2            - If the bootblock wasn't bootable.

      -1           - If failed to read the bootblock.
```

1.100   ARexx command - INSTALLBOOTBLOCK

```
NAME
      INSTALLBOOTBLOCK - Install a bootblock on a disk

SYNOPSIS
      INSTALLBOOTBLOCK unit type

FUNCTION
      Will try to install a bootblock on a disk.

INPUT
      unit         - The drive unit ranging from 0 to 3 (DFx:).
      type         - The type of bootblock:

                      0 - 1.x OFS
                      1 - 1.3 FFS
                      2 - 2.0 OFS
                      3 - 2.0 FFS
                      4 - 2.0 OFS International
                      5 - 2.0 FFS International
                      6 - 3.0 OFS DirCache
                      7 - 3.0 FFS DirCache

RESULT
      0            - Installed succesfully.
      n            - Error code returned by either IoErr() or trackdisk
                     device.
      -99          - Illegal type of bootblock.
```

1.101   ARexx command - UNPACKFILE

```
NAME
     UNPACKFILE - Unpack a file

SYNOPSIS
     UNPACKFILE filename

FUNCTION
     Unpacks/extracts a file to the unpack directory.

INPUTS
     filename    - A fully qualified filename. Must be with path or else
                   it will naturally try to load the file from the current
                   directory.

RESULT
     1           - Succes

     0           - In case of error

NOTES
     The unpack library unpacks/extracts all files in an archive, so if
     you have 2 archives within another archive they will be extracted
     too.
```

1.102   ARexx command - CLEANUP

```
NAME
     CLEANUP - Delete all files in the unpack path

SYNOPSIS
     CLEANUP

FUNCTION
     Deletes all files in the unpack path. You could use this command in
     conjunction with UNPACKFILE, CHECKPATH.
```

1.103   ARexx command - SHOWGUI

```
NAME
     SHOWGUI - Shows Xtruder

SYNOPSIS
     SHOWGUI

FUNCTION
     If Xtruder was asleep it will open it's GUI (graphical user
     interface). Otherwise it will pop it's screen to the front.

NOTES
     If memory is VERY low there may not be enough memory to open
     the GUI and you will then informed about that with a requester.
```

1.104   ARexx command - HIDEGUI

```
NAME
      HIDEGUI - Hides Xtruder

SYNOPSIS
      HIDEGUI

FUNCTION
      Hides the graphical user interface of Xtruder. You can then show it
      again with  SHOWGUI .
```

1.105   Problems with Xtruder

When unpacking a file an error might occur and if so it will be written
like this:

UNPACK ERROR <errornumber>: Problem with <filename>

With version 39.53 of the unpack library you can encounter the following
errors:

```
   1       - Can't open file
   2       - Read/Write error
   3       - Not enough memory
   4       - Can't determine file
   5       - Illegal password
   6       - Hunk error
   7       - Extern file error
   8       - File is corrupt
   9       - Illegal device
  10       - Couldn't open device or create port
  11       - CRC Checksum error
  12       - Checksum error
  13       - Decruncher in library to old
  14       - Error from device
  15       - Couldn't set protection bits
  16       - Output file error
```

The most common error is probably error 3! You can then try to clear the log
buffer to free up some memory!

1.106   The history of Xtruder

```
   1.0
   1.1
   1.2
   1.3
```

1.107   Version 1.0 : 18.10.1994

First release.

1.108   Version 1.1 : 14.11.1994

Bug fixes: Whenever a file with the name '*' were encountered Xtruder
                would hang. Now it simply skips it! This is only a temporary
                solution though.

                Wouldn't delete files in the unpack path after extracting an
                Lha archive.

                Showing bootblock could cause a crash on 68000 machines.

1.109   Version 1.2 : 5.12.1994

Bug fixes: 'Miscellaneous/Check file' didn't write anything if a data
                file weren't infected.

Enhancements: When commenting a file the file's original comment will be
                placed in the string gadget.

                Swedish catalog by Tauno Pinni included.

1.110   Version 1.3 : 6.1.1995

Bug fixes: Rewrote the Delete function so it now it deletes all in the
                unpack directory! (I hope :)

Other: Included old version of Bootblock brainfile in 1.2
                distribution! Sorry %+(

1.111   Future improvements

Here are some things I intend to add to Xtruder:

 * Screen mode adaptive
 * Font sensitive
 * Palette requester
 * Check sectors on a drive
 * Remove vira from files and sectors
 * Memory info
 * Hardware info
 * Unpack track crunched files (DMS)
 * Scroll window
 * Public screen

```
* Vector/LVO check
* Knowing patches
* Check statistics
* Improved CLI interface
* Custom bootblock brainfile
* Custom file brainfile
* Integration of the VIB package (Information on virus can be shown)
* Bootblock analyzer
* More ARexx commands
* Zip/other archivers extract routine
* Full support for multiple BBS lines
* Make coffee :-D

* Most important! What do YOU want?
```

All suggestions will be taken into consideration from ALL users.

Of course whether these future improvements will be implemented or not depends on how many registered users there are. The more the greater enhancements.

1.112 How to contact the author

If you happen to find a bug please contact me. Remember to state exactly the circumstances under which the bug occured and state what computer and equipment you have. I can't do much if you say you have an A500+ so you will also have to state your Workbench and Kickstart version.

If you have translated Xtruder into a non supported language please mail the CT file to me so I can include it in future versions. Thank you.

You can find my (Email) address in How to register .

1.113 Credits

I would like to thank the following people for their great suggestions and sometimes annoying bug reports (Kasper) ;-)

In alphabetical order...

```
Jan Bo Andersen
Paul Browne
Stefan Daugaard
Kasper B. Graversen
Peter Klein
Henrik Lauridsen
Flemming Lindeblad
Thomas Neumann
Erik Løvendahl Sørensen
```

Not to forget Bjørn Moritz and Trucker/Tauno Pinni for the catalog translations.

1.114   Jan Bo Andersen

ßetatester and all in all a great guy :)

1.115   Paul Browne

Leader of SHI UK Division. VERY funny guy :))) Corrected grammar in a
previous documentation but unfortunately that was lost in cyberspace
during a HD crash :-(But maybe next time :)

And BTW: I rule Kick Off II ;-)

1.116   Kasper B. Graversen

Bughunter SUPREME!! Mega thanx dude :) What can I say. Found "some"
undocumented features once in a while. He's like 'A helping hand
when needed' ;*)

1.117   Stefan Daugaard

YAß (Yet another ßetatester :) Found some well hidden bugs. Geez a whole
paper actually.

1.118   Henrik Lauridsen

Thanks for the great (Internet) support. Keep up the excellent work :)

1.119   Peter Klein

Also a ßetatester. And responsible for suggestions leading to Xtruder
being a commodity and having Arexx support. (And thereby delaying the
release some months ;)

1.120   Flemming Lindeblad

ßetatester. Suggested Xtruder should have locale support. Made the
danish translation catalog.

1.121   Thomas Neumann alias Tax of Access

Creator of the brilliant unpack library. Also reported a couple of bugs :)

1.122   Erik Løvendahl Sørensen

```
SHI leader. Great support!
```