# pv

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**REVISION HISTORY**

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# Contents

# Chapter 1

# pv

## 1.1 PV 37.01 user manual

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- POLITE VILLAGE - Version 37.01 (20-Jun-96) by Nicola "Nik" Soggia _____
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Note to everybody who put the village.library in the sys:expansion drawer: use of PV is recommended but not mandatory.

Foreword what the program is for, where it will go Usage about shell arguments Messages diagnostic and error messages New code details about the patches History list of releases

DISTRIBUTION

This package is released under the concept of freeware, the package must be distributed as one whole. The distributor may charge a fee up to the cost of the medium for the entire package.

NO WARRANTY

This package is provided as is, without warranty of any kind, either expressed or implied. Should the package prove defective, you assume the entire cost of all necessary servicing, repair or correction even if I have been advised of the possibility of such damages. I'm not responsible of the results of the use of the package.

SUPPORT

If you have any suggestions, bug reports, or wish to let me know something about the package feel free to contact me at nsoggia@telnetwork.it

## 1.2 Foreword on PV 37.01

VERSION 37.01 FOR VILLAGE V2.58 or V3.9

PV prevents memory header corruption crashes while APM owns the board by fixing a bug of village library: that library doesn't check if the board is in use and always initializes itself and takes over the board even if the board is already in use by someone else. In other words PV is a tool to add or remove patches from the village library file. After installing the PV patch, any program that needs to drive the board directly can just lower the CONFIGME bit in the cd_Flags of product 2167/11 to be sure that village library will never initialize itself until the bit is low.

WHY ALL THIS HAPPENS?

The village library once stored in sys:expansion can be loaded only by the BindDrivers command which checks if the board configme bit is high before loading any library. APM since its first release always cleared the configme bit while using the

memory not allowing BindDrivers to load the library. The new Picasso II+ installation script puts the village.library straight in the libs: drawer, allowing the library to be loaded by everybody, and since the library doesn't chech the configme bit on its own it always takes control of the board even if it is not allowed to do so.

WHY I DID IT

I could fix the bug letting APM install a kludge to prevent exec from opening the village library while APM was in use, but this is the bad way to solve problems: adding kludges to the OS is not my lifestyle, and any program that owns the board without using the village library has to add the same kludge. Programmers know how hard can be to manage SetFunction() without a patch manager installed... The best way, as I said, is to let village library properly arbitrate the board once for all: by this patch the library now checks the configme bit before attempting to take control over the board.

KLAUS, HOW CAN I CONTACT YOU?

As far as I know, village.library is maintained by Klaus Burkert. Klaus, I don't know how to reach you via E-Mail, so here is the hint. To put this arbitration in the source code, look in the InitFunction of the library, the point where product 11 is checked the first time there should be a "If board address is zero, then abort initialization" statement, you may change it in "If board address is zero or configme bit is high, then abort initialization". Maybe you can add it also in products 12 and 13 ;-)

## 1.3  Using PV 37.01

REQUIREMENTS

PV is a pure program that runs on any Amiga shell under kick 2.0 and later releases with 4 Kb or more of stack memory.

WHEN AND WHERE

PV is a tool to add or remove patches from the village library file, it does not add anything harmful in the case the patch is not mandatory. Once installed the patch, you can always revove it. It is recommended to always patch village library, but it is mandatory in all setups that do not load the village library by the BindDrivers command.

ARGUMENTS

FROM/A = this is the mandatory source file name

TO = this is an optional destination file name, if omitted PV will overwrite, if necessary, the source file.

INSTALL/S = this switch tells PV to install the polite patch in the file specified by from/a (village library from now on will check the configme bit).

REMOVE/S = this switch tells PV to remove the polite patch in the file specified by from/a (village library from now on will ignore the configme bit).

ADVANCED SWITCHES USAGE

If you don't specify any switch, PV will just inform you if the file specified by from/a is a patched or not village library.

If you specify both switched, PV will patch original files and will remove the patch from patched files.

If you specify the INSTALL/S switch, PV will patch the original files and will not resave the patched files.

If you specify the REMOVE/S switch, PV will remove patches from the patched files and will not resave the original files.

RETURN CODES

OK (0) tells that everything went as expected, WARN (5) tells that the file was not saved as source and destination contain the same data, ERROR (10) tells that something was wrong in the command line syntax, FAIL (20) tells that something went wrong reading or writing the file, or that the file is not a supported village library version or not a village library at all.

## 1.4  Messages of PV 37.01

STATUS MESSAGES

These messages appear when the from/a file is found and loaded.

LOADING xx AS LIBRARY Vnn.nn file "xx" has been loaded and recognized as a supported library version.

xx IS NOT A VALID VILLAGE.LIBRARY FILE file "xx" has been loaded but not recognized as a supported library version, a list of supported versions will follow this statement (actually 2.58 and 3.9).

ACTION MESSAGES

These messages appear after the status messages.

FILE IS A ORIGINAL LIBRARY the file is a village library that ignores the configme bit, it will not be resaved.

FILE IS A PATCHED LIBRARY the file is a village library that checks the configme bit, it will not be resaved.

RESTORED ORIGINAL CODE the file was a village library that checked the configme bit, it will now be saved as one that ignores the configme bit.

INSERTED NEW CODE the file was a village library that ignored the configme bit, it will now be saved as one that checks the configme bit.

OTHER MESSAGES

Standard localized error messages appear whenever a dos error occurs.

## 1.5   Details about the patches

HOW IT WORKS

I added a bit test instruction in a fragment that checks if the memory board found its place in the Zorro-II addresing space. I was lucky enough to find enough room to insert my new code without expanding the library in size.

input: A4=pointer to execbase output: A0=configdev address scratch: D0-D1/A0-A1 (all other registers must be preserved)

village.library 2.58: old initfunction  village.library 2.58: new initfunction  village.library 3.9 : old initfunction  village.library 3.9 : new initfunction

## 1.6   Releases list from 33.01 to 37.01

DEVELOPMENT

I write and test PV on an A3000/030-25, 2 Mb chip, 8 Mb fast, 2 Mb Picasso-II. Before releasing each new version to the public I test the program under enforcer and kick 40.70.

RELEASE HISTORY

37.01 (20-Jun-96) PoliteVillage first public release. Thanks to: Paolo Maggi for reporting that village opened when APM was active

## 1.7   village.library: initfunction - old 2.58

INCDIR "include:" INCLUDE "exec/types.i" INCLUDE "libraries/configvars.i" INCLUDE "libraries/expansion_lib.i" IFND NULL NULL EQU 0 ENDC

** fragment of village.library v2.58 (27-apr-94) initfunction ********************************************************** ** hunk offset: $55c - file offset: $57c (48 bytes)

oldcode move.l #2167,d0 ; manufacturer: village tronic moveq #11,d1 ; product: picasso 2/2+ memory movea.l #NULL,a0 move.l a6,-(a7) movea.l a4,a6 jsr _LVOFindConfigDev(a6) movea.l (a7)+,a6 move.l d0,($e4).l ; reloc32 of hunk0+$e4 at hunk0+$576 tst.l d0 beq oldcode+1396 movea.l d0,a0 move.l cd_BoardAddr(a0),d0 tst.l d0 beq oldcode+1396

END

## 1.8 village.library: initfunction - new 2.58

INCDIR "include:" INCLUDE "exec/types.i" INCLUDE "libraries/configvars.i" INCLUDE "libraries/expansion_lib.i"

** fragment of village.library v2.58 (27-apr-94) initfunction ******************************************************
** hunk offset: $55c - file offset: $57c (48 bytes)

newcode move.l #2167,d0 ; manufacturer: village tronic moveq #11,d1 ; product: picasso 2/2+ memory suba.l a0,a0 exg.l a4,a6 jsr _LVOFindConfigDev(a6) exg.l a4,a6 move.l d0,($e4).l ; reloc32 of hunk0+$e4 at hunk0+$570 beq newcode+1396 movea.l d0,a0 btst #CDB_CONFIGME,cd_Flags(a0) beq newcode+1396 tst.l cd_BoardAddr(a0) beq newcode+1396

END

## 1.9 village.library: initfunction - old 3.9

INCDIR "include:" INCLUDE "exec/types.i" INCLUDE "libraries/configvars.i" INCLUDE "libraries/expansion_lib.i" IFND NULL NULL EQU 0 ENDC

** fragment of village.library v3.9 (29-apr-96) initfunction ******************************************************
** hunk offset: $414 - file offset: $434 (48 bytes)

oldcode move.l #2167,d0 ; manufacturer: village tronic moveq #11,d1 ; product: picasso 2/2+ memory movea.l #NULL,a0 move.l a6,-(a7) movea.l a4,a6 jsr _LVOFindConfigDev(a6) movea.l (a7)+,a6 move.l d0,($f0).l ; reloc32 of hunk0+$f0 at hunk0+$42e tst.l d0 beq oldcode+698 movea.l d0,a0 move.l cd_BoardAddr(a0),d0 tst.l d0 beq oldcode+698

END

## 1.10 village.library: initfunction - new 3.9

INCDIR "include:" INCLUDE "exec/types.i" INCLUDE "libraries/configvars.i" INCLUDE "libraries/expansion_lib.i"

** fragment of village.library v3.9 (29-apr-96) initfunction ******************************************************
** hunk offset: $414 - file offset: $434 (48 bytes)

newcode move.l #2167,d0 ; manufacturer: village tronic moveq #11,d1 ; product: picasso 2/2+ memory suba.l a0,a0 exg.l a4,a6 jsr _LVOFindConfigDev(a6) exg.l a4,a6 move.l d0,($f0).l ; reloc32 of hunk0+$f0 at hunk0+$428 beq newcode+698 movea.l d0,a0 btst #CDB_CONFIGME,cd_Flags(a0) beq newcode+698 tst.l cd_BoardAddr(a0) beq newcode+698

END