

## ZVCOPY INFO

ZVCOPY is used to copy a z86VM file between a CMS user and the filesystem. The syntax is as follows:

ZVCOPY z86vmIO USERID TARGET PCFILE FN FT FM  
z86vmIO = VM ID OF z86vm to I/O machine XXX.YYY.

TARGET = PC or CMS.

PCFILE = PCFILE name to Create/Read.

FN/FT/FM = CMS file name.

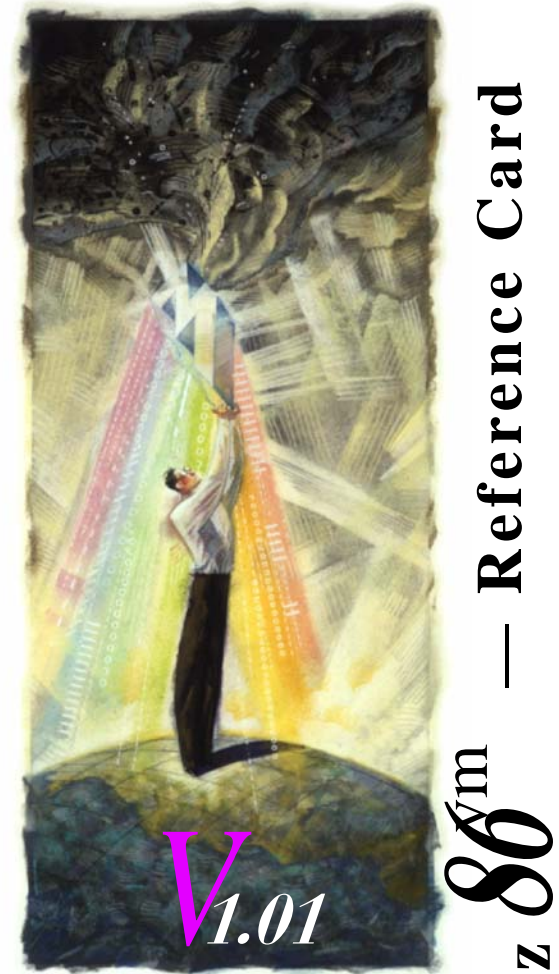
TARGET = PC implies you are copying from CMS to the z86VM file system.

TARGET = CMS implies you are copying from the z86VM file system to CMS.

Z86<sup>vm</sup>

1980 - 2010  
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YEARS OF ADVANCED  
DATACENTER SOLUTIONS  
Mantissa Corporation

z86vm Reference Card (110301).fm



## z86vm MACHINE STARTUP INFO

IPL PARMS:	O=AAAAAAA,DEBUG=BBBBBBB,TCPIP=TCPIP, VNC=CCCC,TIMEOUT=DD,REPLAY=E
AAAAAAA	z86vmI/O machine you wish to connect with.
BBBBBBB	Debug machine you wish to connect with ( <i>this is where the old CMS files (traces and such) are written.</i> )
TCPIP	TCP/IP machine you wish to connect with.
CCCC	Port number for your VNC connection ( <i>these cannot be arbitrarily assigned; they must match VM/TCPIP DEFS.</i> ) USER1 = 776 USER2 = 777 USER3 = 778 USER4 = 779
DD	TIMEOUT z86vm task after specified number of seconds elapsed.
E	(Y/N)N=Bring up z86vm (Default)Y=START in VIDEO REPLAY MODE ( <i>only to be used by technical people.</i> )

## X86 Debugger Quick Reference

q	Quit Debugging
k	Kill Emulator (generate dump)
c	Continue To Next Breakpoint
g	Go
d	Display Something
regs:	display Z architecture GPR's
cpu:	display X86 CPU information
eip:	display the current instruction address
psw:	display the Z PSW
creg:	display x86 control registers
areg:	display Z ALET registers
freg:	display Z and X87 floating point registers
sreg:	display X86 segment register information
gdt:	display gdt information (example: d gdt [Hex Offset])
idt:	display idt information (example: d idt [Hex Offset])
lp:	display X86 boot load point
zlp:	display z86vm load point
fstk:	display floating point stack
addr:	display data at address (example: d addr[,length])
da	Display Alet Data
m	Modify primary address space data
ma	Modify secondary address space data
sb	Set Breakpoint (ex: sb address [count])
db	[Number] Delete A Breakpoint (Default: Current)
sw	Set Watchpoint (sw address [data])
dw	Delete Current Watchpoint
sh	Show Something
b:	Breakpoints
w:	Watchpoints
code:	info/code block
set	Set Something On/Off
s	Single Cycle
segadd	Add Segment Reg To Reg (ex: reg,segreg)
h	Display Help
?	Show Prev Command

## CONSOLE COMMANDS

Q TASK	Displays all tasks that are started in the system. You should normally see: <b>ICONMGR</b> - IUCV Connection Manager <b>CONSOLE</b> - Console Input Processor <b>z86vm</b> - z86vm/x86 main dude <b>ZVNCSErv</b> - VNC Server  This display will show you the status of each task ACTIVE/WAIT etc., along with the current PSW.
Q ECB	This display shows the ECBs that are on the dispatch list. Any ECB that is being waited on in the system will be listed here.
Q X86 XXXXXXXX XXXXXXXX	The x86 address you want to map to a Z real address.
REPLID	Shows the reply number of any outstanding WTORS.
Q CONN	Shows the connection status for the following IUCV connections:  <b>z86vm I/O Machine</b> <b>DEBUG Machine</b> <b>TCPIP Machine</b> <b>VNC Server Status</b>
DEBUG	Shows the REGS/PSW from the last ABEND.
X86PER START	Starts instruction capture.
X86PER STOP	Stops instruction capture.
KILL	Kills x86 task.
SHOW COMAREA	Shows z86vm common area (R12).
SHOW INT	Shows pending x86 interrupts.
SHOW PORTS	Shows port table.
SHOW KEYS	Shows pending keys in x86 keyboard buffer
SHOW LASTKEY	Shows last Keys sent to x86.
SHOW KEYTAB	Shows Key Table.
SHOW X86ADR	SHOWS Starting alert address in real storage.
SHOW ZCPUSERA	Shows address of ZCPUSERA.
X86	Talk to x86 debugger.
CLEAR TIMEOUT	Clear timeout value ( <i>allows task to run forever.</i> )
TRACE INT	Trace x86 Interrupts ( <i>Reader Sysrct File.</i> )
TRACE KEY	Activate keystroke trace.
TRACE MOUSE	Activate mouse trace.
VIDEO SAVE ON	Start video recording.
VIDEO SAVE OFF	Stop video recording.
VIDEO TILE ON	Generate TILEBOX on video for debug.
VIDEO TILE OFF	Stop TILEBOX generating.
INT OFF	Turn off x86 interrupts.
INT ON	Turn on x86 interrupts.

## z86vm I/O MACHINE STARTUP INFO

### IPL PARMS: NONE

### CONSOLE COMMANDS:

Q TASK	Displays all tasks that are started in the system - you should normally see: <b>CONSOLE</b> - CONSOLE INPUT PROCESSOR  This display will show you the status of each task active/wait etc., along with the current PSW.
Q ECB	This display shows the ECBs that are on the dispatch list any ECB that is being waited on in the system will be listed here.
REPLID	Shows the reply number of any outstanding WTORS.
Q DASD	Displays all the attached DASD to the virtual machine, as well as, their status and if they belong to the file system.
Q AUSER	Displays all active users ( <i>these are users that have files open to the file system.</i> )
Q FUSER	Displays all users defined to the file system along with their boot information.
Q FILES AAAAAAAA	Displays all the files defined to the User AAAAAAAA.
Q PART	UserID filename ( <i>Options: Displays partition information for the file filename and the specified UserID.</i> ) If you specify an option of HEX it will dump the MBR record in HEX format.
Q BOOT AAAAAAAA	Displays the boot information for the User AAAAAAAA.
ADDUSER AAAAAAAA	Adds User AAAAAAAA to the file system.
ADDBOOT AAAAAAAA XXXXX	Adds boot information for User AAAAAAAA XXXXX is the boot information. Example: ADDBOOT USER4 MEM=2G FDA=M32.IMG BOOT=FDA TYPE=16
ADDFILE USERID TYPE FILEID SECTORSIZE DISKSIZE	Add a file to the file system. <b>UserID</b> is the user that the new file belongs. <b>TYPE</b> is File type: HD/FD/CD <b>FILEID</b> is name of file ( <i>up to 200 CHARs.</i> ) <b>SECTORSIZE</b> of 512 for HD/FD; 2048 for CDROM. <b>DISKSIZE</b> is size of disk specified in KBytes, MBytes, GBytes.
ADDFILE USER2 HD DISK.IMG 512 200M	Defines a 200mb Hard Disk.
ADDFILE USER2 FD FLOPPY.IMG 512 144K	Defines a 144kb Floppy Disk.
ADDFILE USER2 CD CDROM.IMG 2048 100M	Defines a 100mb CDROM .
INIT CUU VOLSER	Creates/defines a volume to the file system.
FINIT CUU VOLSER	Creates/defines a volume to the file system but doesn't prompt and ask " <i>Are you sure?</i> ".