DVD-Video/DVD-Audio

Virtual Machine Command Encoding

Release 1.0.5

Apr 09 2004

1.0.5 (Apr 09 2004): Turn off header/footer -> even larger fonts! Fit field format list onto fewer pages.

1.0.4 (Apr 08 2004): Use smaller margins & larger font sizes for legibility -> more pages. Capitalization fiddling.

1.0.3 (Apr 06 2004): Formatting improvements: Cmd_Formats now 2 pages. Minor changes to explanations of command formats 0, 2, 3.

1.0.2 (Apr 01 2004): Formatting improvements using OpenOffice 680 M32.

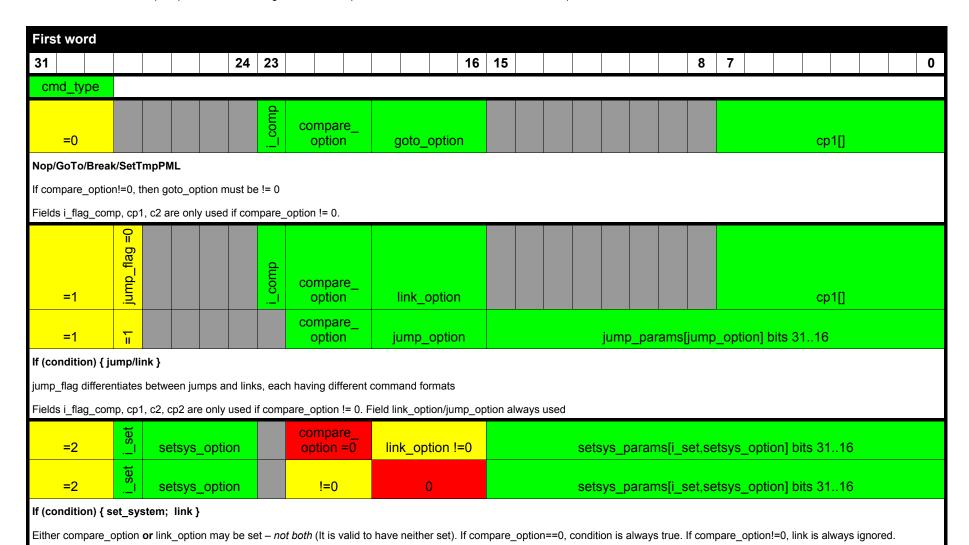
1.0.1 (Mar 25 2004): Initial release.

In general, all fields must be set to a valid value – for enumerations ("options"), see the tables later in this document.

Some fields, such as compare_option and link_option are optional in many commands (set to zero when unused) – except where noted.

Fields cp1, cp2 are only used if compare_option != 0. Field link_params only used if link_options != 0. Field setsys_option always used.

In some formats with multiple options fields, it is illegal to use both options at the same time – see the command-specific notes.



			0								
=3	i_set	set_option	i_comp	compare_ option =0	link_option !=0						parm_n
=3	i_set	set_option	i_comp	!=0	=0		cp1[]				parm_n
If (condition) {	set; link	}									
Either compare	_option c	or link_option may be	set – no	t both (It is valid to	have neither set). If con	npare_optio	n==0, condition is alway	s true. If comp	pare_option	!=0, link is al	ways ignored.
Fields cp1, c2 a	are only u	sed if compare_option	n!= 0. F	ield link_params o	nly used if link_options!	= 0. Field se	et_option always used.				
=4	i_set	set_option	i_comp	compare_ option	parm_n			set_param	s_m[i_se	t]	
set; if (condition	on) { link	:}									
compare_option	n must be	e != 0									
=5 or 6	i_set =0	set_option	i_comp	compare_ option	parm_n	parm_flag	parm	_m		ср	1[]
=5 or 6	1	set_option		compare_ option	parm_n			i_v	/al		
5: if (condition) {	nk }									
6: if (condition) { set };	link									
compare_optior	n must be	e != 0									

occoria W	vord												
31	24 23	16	15				8	7					0
	c2[i_comp]				got	o_pa	ıran	ns[go	to_op	tion]			
			1										
	c2[i_comp]				lin	k pa	ıran	ns[linl	opti	on]			
								Ť					
	jump_params[jump_option] bits 150			cp1[]							cp2	2[]	
	setsys_params[i_set,setsys_option] bits 150				lin	k_pa	ıran	ns[linl	_opti	ion]			
	setsys_params[i_set,setsys_option] bits 150			40							cp2	SEI.	
				cp1[]							CD.		

set_param	us_m[i_set]	link_params[link_option]
set_param	ıs_m[i_set]	c2[i_comp]
c2[i_c	comp]	link_params[LINKSINS]
c2[i_c	comp]	link_params[LINKSINS]
cp1[]	cp2[]	link_params[LINKSINS]



ср2	2[]				
7					0
prm_flag		prm	ın		

c2[i_co	mp=	=0]								
15					8	7					0
						prm_flag		prm	ın		

c2[i_co	mp=	=1]							
15					8	7				0
ival										

got	o_pa	aran	ns[g	oto_	opti	on=l	NOP]				
15							8	7				0

got	o_pa	aran	ns[g	oto_	opti	on=(GOT	O]				
15							8	7				0
								рс				

set	_par	ams	_m_	non	j	
7						0
parm_flag			pari	m_m	1	

set	_par	ams	_m_	į							
15						8	7				0
i_va	al										

set	_par	ams	_m[i_se	t=0]								
15						8	7						0
							set	_para	ams_	_m_	non_	j	

set	_par	ams	_m[i_se	t=1]						
15						8	7				0
set_	_para	ams_	_m_i								

got	o_pa	aran	ns[g	oto_	opti	on=l	BRE	AK]				
15							8	7				0

got	o_pa	aran	ns[g	oto_	opti	on=	SET"	ТМР	PML	.]			
15							8	7					0
				ptl_	lvl			рс					

link_params[link_option==LINKSINS]	link_params[link_option==LINKPTTN]
15 8 7 0	15 8 7
hl btnn linkins	hl btnn pttn
hl_btnn is not used for linkins==RSM	
link_params[link_option==LINKTKN]	link_params[link_option==LINKTKNGP]
15 8 7 0	15 8 7
hl_btnn tkn	hl_btnn
-	
link_params[link_option==LINKDLISTN]	link_params[link_option==LINKDLISTNG
15 8 7 0	15 8 7
hl_btnn dlistn	hl_btnn
link_params[link_option==LINKPGCN]	link_params[link_option==LINKPGCNGP]
15 8 7 0	15 8 7
pgcn	
link_params[link_option==LINKPGN]	link_params[link_option==LINKPGNGP]
15 8 7 0	15 8 7
hl_btnn pgn	hl_btnn
link naramallink antion=-LINKCNI	link paramellink ention INKONCO
link_params[link_option==LINKCN]	link_params[link_option==LINKCNGP]
15 8 7 0	15 8 7
hl btnn cn	hl btnn

0

0

0

0

0

gprmn

gprmn

gprmn

gprmn

gprmn

jump_params[jump_opti	on=EXIT]									
31		23		16 15		8	7			0
jump_params[jump_opti	on=JUMF	PTT]								
31	24 2	23		16 15		8	7			0
							t	tn		
						-				
jump_params[jump_opti	on=JUMF	PVTS_T1	[]							
31	24 2	23		16 15		8	7			0
							١	rts_ttn		
							·			
jump_params[jump_opti	on=JUMF	PVTS_PT	ii)							
31	24 2	23		16 15		8	7			0
	pttn						١	rts_ttn		
						-				
jump_params[jump_opti	on=JUMF	PSS]								
31	24 2	23		16 15		8	7			0
							doma	<mark>in</mark>		
domain == FP_PGC or VN										

jum	ոթ_բ	oarai	ms[jı	ump	_op	tion:	=JUI	MPS	S,do	omai	n=V	TSN	1]														
31							24	23						16	15							8	7				0
									vts	_ttn						vtsn	(0 -	> cu	ırrent	t VT	S)		VT	SM	me	nu	

jun	np_p	arar	ns[jı	ımp _.	_opt	ion=	=JUN	/IPS	S,d	omai	n=V	MGI	M]											
31							24	23						16	15				8	7				0
	pgc	n																		VIV	IGM			

jun	np_p	aran	ns[jɪ	ımp_	opti	on=	CAL	LS	S]														
31							24	23				16	15				8	7					0
	pgc	n											rsm	_cn				do	main		mer	าน	

pgcn field only valid for (domain==VMGM). menu field only valid for (domain==VTSM)

jun	np_p	arar	ns[j	ump	_opt	ion=	JUN	ИРТ	TGR]												
31							24	23				16	15			8	7				0
																			att_gri	1	

jum	ոթ_բ	oaram	s[jum	ıp_c	opti	ion=	JUN	ИРТ	K]													
31							24	23					16	15				8	7			0
											att_	grn								tkn		

jun	np_p	arar	ns[j	ump	_opi	tion:	=AM	GM_	RS	M]													
31							24	23					16	15				8	7				0

sets	ys_	paraı	ms[i	_set	=0,se	etsys	_or	otio	n=S	ET\$	STN]																
31						24	1 2	23							16	15					8	7					0
								asın								spstn						_agln					
								ies				astn	_gp	rmn		set		sps	tn_g	prmr	ı	set		aglr	n_gp	rmn	

sets	sys_	_para	ams	[i_se	et=1,	sets	ys_ 24		on≕	SETS	STN]			16	15					0	7				0
31							24	23						10	13	D				0					,
															_	flac									
								stn							pstr	_ds					gln				
								اتًا							i s	٦					ات				
								se				astr	n		se	ds	sps	tn			se		aglı	1	

For DVD-Audio discs, only 2 audio streams may exist, so only the LSB of astn is valid.

setsy	s_par	ams	[i_se	t=0,	sets	ys_	optio	on=	SETI	ITVI	MR]																
31						24	23						16	15						8	7						0
											gpr	mn			tt_pg	gcn											
	s_par	ams	[i_se	t=1,	sets			on=	SET	ITV	MR]																
31						24	23						16	15						8	7						0
nv_tm	nr														tt_pg	gcn											
	s_par	ams	[i_se	t=0,	sets			on≕	SET(GPR	MM	D)															
31					_	24	23						16	15						8	7						0
											anr	mn									mode			apr	m ni	um	
											gpi	mn									⊢			gpi	m_nı	וווג	
setsv	s_par	amel	مع تا	t=1	sats	eve	onti	n=	SET	3PR	MMI	OI.															
31	5_ par	u	[I_00	,			23					-]	16	15						8	7						0
0.														.0													
gprm_	_val																				mode			gpri	m_nı	um	
setsy	s_par	ams	[i_se	t=0,	sets	ys_	optio	on=	SET	ΔMX	MD]																
31						24	23						16	15						8	7						0
																								gpri	mn		
setsy	s_par	ams	[i_se	t=1,	sets	ys_	optio	on=	SET	XΜΑ	MD]																
31						24	23						16	15						8	7						0
																	_ach0	ach0	ach0				_ach1	_ach1	ach1		
																	4_mix_	3_mix	2_mix				ach4_mix	3_mix_	2_mix		
																	ach4_	ach3_	ach2				ach	ach3_	ach2_		

sets	sys_pa	arams	[i_set=	-0 ,s	etsy	ys_c	optio	on=S	SETH	IL_E	BTNI	N]										
31						24	23						1	6 1	15			8	7			0
																					gprmn	

setsys_par	ams[i_set=	1,setsys_op	tion=SETHL_BTN	NN]				
31		24 2	23	16	15	8	7	0
					hl_btnn			

link_option
1: LinkSIns
2: LinkTkN
3: LinkDListN
4: LinkPGCN
5: LinkPTTN
6: LinkPGN
7: LinkCN
10: LinkTknGP
11: LinkDListNGP
12: LinkPGCNGP
14: LinkPGNGP
15: LinkCNGP

menu

2: TITLE

3: ROOT

4: SUB_PICTURE

5: AUDIO

6: ANGLE

7: PTT

linkins
0: NoLink
1: LinkTopC
2: LinkNextC
3: LinkPrevC
5: LinkTopPG
6: LinkNextPG
7: LinkPrevPG
9: LinkTopPGC
10: LinkNextPGC
11: LinkPrevPGC
12: LinkGoUpPGC
13: LinkTailPGC
16: Rsm
18: LinkNextDList
19: LinkPrevDList

jump_option
1: Exit
2: JumpTT
3: JumpVTS_TT
5: JumpVTS_PTT
6: JumpSS
8: CallSS
9: JumpTT_GR
10: JumpTK
11: AMGM_Rsm
goto_option
0: Nop
1: GoTo
2: Break
2: SetTmpPML

_	
	domain
	0: FP
	1: VMGM_R
	2: VTSM
	3: VMGM
	set_option
	1: Mov
	2: Swp
	3: Add
	4: Sub
	5: Mul
	6: Div
	7: Mod
	8: Rnd

9: And

10: Or

11: Xor

	setsys_option
	1: SetStn
OOT	2: SetNvTmr
	3: SetGprmMd
	4: SetAMxMd
	6: SetHL_BTNN

compare_option
1: BC
2: EQ
3: NE
4: GE
5: GT
6: LE
7: LT