







```
0000 1 .TITLE PTEDUMP - DUMP PTE AND PFN DATA BASE
0000 2 .IDENT 'V04-000'
0000 3
0000 4 :*****
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0000 23 :
0000 24 :
0000 25 :*****
0000 26 :
0000 27 :++
0000 28 : FACILITY: USER MODE MEMORY MANAGEMENT DIAGNOSTIC ROUTINE
0000 29 :
0000 30 : ABSTRACT:
0000 31 :
0000 32 : ENVIRONMENT: REQUIRES READABILITY OF KERNEL DATA BASES
0000 33 :
0000 34 :--
0000 35 :
0000 36 : .SBTTL HISTORY ; DETAILED
0000 37 :
0000 38 : AUTHOR: PETER H. LIPMAN , CREATION DATE: 19-OCT-76
0000 39 :
0000 40 : MODIFIED BY:
0000 41 : : VERSION
0000 42 : 01 -
0000 43
```

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0000 45      .SBTTL  DECLARATIONS
0000 46
0000 47  :
0000 48  : INCLUDE FILES:
0000 49  :
0000 50      $PCBDEF      ;PROCESS CONTROL BLOCK DEFINITIONS
0000 51      $PHDDEF      ;PROCESS HEADER DEFINITIONS
0000 52      $PTEDEF      ;PAGE TABLE ENTRY DEFINITIONS
0000 53      $$SDEF       ;SYSTEM STATUS DEFINITIONS
0000 54      $VADEF       ;VIRTUAL ADDRESS DEFINITIONS
0000 55      $WSLDEF      ;WORKING SET LIST DEFINITIONS
0000 56  :
0000 57  : EXTERNAL SYMBOLS:
0000 58  :
0000 59  :
0000 60  :
0000 61  : MACROS:
0000 62  :
0000 63  :
0000 64  : EQUATED SYMBOLS:
0000 65  :
0000 66  :   OFFSETS FROM AP
0000 67  :
00000000 0000 68      PARAMCNT      =      0      ;PARAMETER COUNT
00000004 0000 69      VA              =      4      ;VIRTUAL ADDRESS
00000008 0000 70      ADRBYTECNT     =      8      ;ADR OF RETURN BYTE COUNT
0000000C 0000 71      OUTSTRING      =     12     ;ADR OF OUTPUT STRING DESCRIPTOR
00000010 0000 72      PROCESSINDEX   =     16     ;PROCESS INDEX
00000010 0000 73      PTEADR         =     16     ;PAGE TABLE ENTRY ADDRESS
00000014 0000 74      PHDADR         =     20     ;PROCESS HEADER ADDRESS
00000018 0000 75      PFNBASE        =     24     ;BASE OF PFN DATA
0000001C 0000 76      MAXPAGCNT      =     28     ;SGNSC MAXPAGCNT
0000 77      ;NO. OF PAGES COVERED BY PFN DATA BASE
0000 78  :
0000 79  :   OFFSETS FROM FP
0000 80  :
FFFFFFFFC 0000 81      FAOARG         =     -4     ;FAO ARGUMENT LIST POINTER
FFFFFFFFB 0000 82      PTEINDEX      =     -8     ;SAVED INDEX TO PAGE TABLE ENTRY
0000 83  :
0000 84  : OWN STORAGE:
0000 85  :
00000000 0000 86      .PSECT  YEXEPAGED      ;PAGED PSECT

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0000 88      .SBTTL TABLES AND CONTROL STRINGS
0000 89      :
0000 90      : PROTECTION CODE TABLE
0000 91      :
0000 92      PROTECTIONTBL:
20 20 41 4E 0000 93      .ASCII /NA /
2A 2A 2A 2A 0004 94      .ASCII /****/
20 20 57 4B 0008 95      .ASCII /KW /
20 20 52 4B 000C 96      .ASCII /KR /
20 20 57 55 0010 97      .ASCII /UW /
20 20 57 45 0014 98      .ASCII /EW /
57 4B 52 45 0018 99      .ASCII /ERKW/
20 20 52 45 001C 100     .ASCII /ER /
20 20 57 53 0020 101     .ASCII /SW /
57 45 52 53 0024 102     .ASCII /SREW/
57 4B 52 53 0028 103     .ASCII /SRKW/
20 20 52 53 002C 104     .ASCII /SR /
57 53 52 55 0030 105     .ASCII /URSW/
57 45 52 55 0034 106     .ASCII /UREW/
57 4B 52 55 0038 107     .ASCII /URKW/
20 20 52 55 003C 108     .ASCII /UR /
0040 109     :
0040 110     : OWNER FIELD
0040 111     :
0040 112     OWNERTBL:
55 53 45 4B 0040 113     .ASCII /KESU/
0044 114     :
0044 115     : PAGE TABLE ENTRY TYPE
0044 116     :
0044 117     PTETYPETBL:
53 4E 41 52 54 0044 118     .ASCII /TRANS/
20 58 54 50 47 0049 119     .ASCII /GPTX /
4C 49 46 47 50 004E 120     .ASCII /PGFIL/
20 20 58 54 53 0053 121     .ASCII /STX /
20 4F 52 5A 44 0058 122     .ASCII /DZRO /
44 49 4C 41 56 005D 123     .ASCII /VALID/
47 41 50 4F 49 0062 124     .ASCII /IOPAG/
0067 125     :
0067 126     : MODIFY FLAG TABLE
0067 127     :
0067 128     MODIFYTBL:
4D 20 0067 129     .ASCII / M/
0069 130     :
0069 131     : LOCKED IN WORKING SET LIST TABLE
0069 132     :
0069 133     WSLOCKTBL:
4C 20 0069 134     .ASCII / L/
006B 135     :
006B 136     : FAO CONTROL STRINGS
006B 137     :
006B 138     PTECTL:
44 41 21 28 20 4C 58 21 20 4C 58 21 006B 139     .ASCII /!XL !XL (!AD !AD !AD !AD !AD)/
44 41 21 20 44 41 21 20 44 41 21 20 0077
29 44 41 21 20 0083
0000001D 0088 140     PTECTLSIZ=.-PTECTL
0088 141
55 35 21 20 42 58 21 20 42 58 21 20 0088 142     .ASCII / !XB !XB !SUW !XL !XL !XW !XW/

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00F2 151      .SBTTL MMG$PTEDUMP - DUMP PTE AND PFN DATA BASE
00F2 152
00F2 153      :++
00F2 154      : FUNCTIONAL DESCRIPTION:
00F2 155      :
00F2 156      :     THIS ROUTINE FORMATS A SINGLE LINE (WITH NO LEADING OR TRAILING
00F2 157      : CR,LF) INTO THE BUFFER SPECIFIED BY THE ADDRESS OF A STRING DESCRIPTOR
00F2 158      : THE TEXT DESCRIBES THE PAGE TABLE ENTRY AND ITS PFN DATA BASE IF ANY
00F2 159      : FOR THE SPECIFIED VA IN THE SPECIFIED PROCESS.
00F2 160      :
00F2 161      :
00F2 162      : CALLING SEQUENCE:
00F2 163      :
00F2 164      :     CALLG  ARGPTR,MMG$PTEDUMP
00F2 165      :
00F2 166      : INPUT PARAMETERS:
00F2 167      :
00F2 168      :     VA(AP)          =      VIRTUAL ADDRESS
00F2 169      :     ADRBYTECNT(AP) =      ADDRESS TO RETURN SIZE IN BYTES OF OUTPUT STRING
00F2 170      :     OUTSTRING(AP)  =      DESCRIPTOR OF OUTPUT STRING
00F2 171      :     PROCESSINDEX(AP)=     PROCESS INDEX IN LOW 16 BITS
00F2 172      :
00F2 173      : IMPLICIT INPUTS:
00F2 174      :
00F2 175      :     NONE
00F2 176      :
00F2 177      : OUTPUT PARAMETERS:
00F2 178      :
00F2 179      :     RO = SYSTEM STATUS
00F2 180      :     @ADRBYTECNT(AP) = SIZE OF STRING FORMATTED OR 0 IF NOTHING DONE
00F2 181      :
00F2 182      : IMPLICIT OUTPUTS:
00F2 183      :
00F2 184      :     NONE
00F2 185      :
00F2 186      : COMPLETION CODES:
00F2 187      :
00F2 188      :     $$$_NORMAL      :SUCCESSFUL COMPLETION
00F2 189      :     $$$_LENVIO     :LENGTH VIOLATION
00F2 190      :     $$$_VAOFF      :VA IS OFF THE END OF THE PAGE TABLE
00F2 191      :
00F2 192      : SIDE EFFECTS:
00F2 193      :
00F2 194      :     NONE
00F2 195      :
00F2 196      :--

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015D 238 .SBTTL SDASPTEDUMP - DUMP PTE AND PFN DATA BASE
015D 239
015D 240 :++
015D 241 : FUNCTIONAL DESCRIPTION:
015D 242 :
015D 243 : THIS ROUTINE FORMATS A SINGLE LINE (WITH NO LEADING OR TRAILING
015D 244 : CR,LF) INTO THE BUFFER SPECIFIED BY THE ADDRESS OF A STRING DESCRIPTOR
015D 245 : THE TEXT DESCRIBES THE PAGE TABLE ENTRY AND ITS PFN DATA BASE IF ANY
015D 246 : FOR THE SPECIFIED VA.
015D 247 : IT PROVIDES THE SYSTEM DUMP ANALYZER WITH A STANDARD FORMATTING
015D 248 : ROUTINE WHICH IS INDEPENDENT OF SYSTEM GENERATION DIFFERENCES.
015D 249 :
015D 250 : CALLING SEQUENCE:
015D 251 :
015D 252 : CALLG ARGPTR,SDASPTEDUMP
015D 253 :
015D 254 : INPUT PARAMETERS:
015D 255 :
015D 256 : VA(AP) = VIRTUAL ADDRESS
015D 257 : ADRBYTECNT(AP) = ADDRESS TO RETURN SIZE IN BYTES OF OUTPUT STRING
015D 258 : OUTSTRING(AP) = DESCRIPTOR OF OUTPUT STRING
015D 259 : PTEADR(AP) = PAGE TABLE ENTRY ADDRESS
015D 260 : PHDADR(AP) = PROCESS HEADER ADDRESS
015D 261 : PFNBASE(AP) = PFN$A_BASE - BASE ADDRESS OF PFN DATA BASE
015D 262 : MAXPAGCNT(AP) = SGN$C_MAXPAGCNT - PAGES COVERED BY PFN DATA BASE
015D 263 :
015D 264 : IMPLICIT INPUTS:
015D 265 :
015D 266 : NONE
015D 267 :
015D 268 : OUTPUT PARAMETERS:
015D 269 :
015D 270 : RO = SYSTEM STATUS
015D 271 : @ADRBYTECNT(AP) = SIZE OF STRING FORMATTED OR 0 IF NOTHING DONE
015D 272 :
015D 273 : IMPLICIT OUTPUTS:
015D 274 :
015D 275 : NONE
015D 276 :
015D 277 : COMPLETION CODES:
015D 278 :
015D 279 : SSS_NORMAL ;SUCCESSFUL COMPLETION
015D 280 :
015D 281 : SIDE EFFECTS:
015D 282 :
015D 283 : NONE
015D 284 :
015D 285 : --
015D 286 :
015D 287 SDASPTEDUMP::
015D 288 .WORD ^M<R2,R3,R4,R5,R6,R7>
015F 289 MOVL VA(AP),R2 ;VIRTUAL ADDRESS
0163 290 SUBL3 PHDADR(AP),PTEADR(AP),R3 ;FORM INDEX TO PAGE TABLE ENTRY
0169 291 ASHL #-2,R3,R3 ;LONG WORD INDEX
016E 292 MOVAL PHDADR(AP),R5 ;POINTER TO PROCESS HEADER ADDRESS
0172 293 MOVL PFNBASE(AP),R6 ;BASE ADR OF PFN DATA BASE
0176 294 MOVL MAXPAGCNT(AP),R7 ;PAGE COUNT COVERED BY PFN DATA BASE

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53 10 52 04 AC DO 00FC
53 53 AC 14 AC C3 0163
55 53 FE 8F 78 0169
56 14 AC DE 016E
57 18 AC DO 0172
57 1C AC DO 0176

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PTEDUMP  
V04-000

I 13  
- DUMP PTE AND PFN DATA BASE 16-SEP-1984 02:38:09 VAX/VMS Macro V04-00  
SDASPTEDUMP - DUMP PTE AND PFN DATA BASE 5-SEP-1984 03:46:50 [SYS.SRC]PTEDUMP.MAR;1

R  
V

017A 295 :  
017A 296 : FALL THROUGH TO FORMAT PTE  
017A 297 :

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017A 299 .SBTTL FORMAT THE PAGE TABLE ENTRY
017A 300 :
017A 301 : R2 = VIRTUAL ADDRESS
017A 302 : R3 = LONG WORD INDEX TO PAGE TABLE ENTRY
017A 303 : R5 = POINTER TO PROCESS HEADER ADDRESS
017A 304 : R6 = BASE OF PFN DATA ARRAY
017A 305 : R7 = NO. OF PAGES COVERED BY THE PFN DATA BASE
017A 306 :
017A 307 .ENABL LSB
017A 308 FORMATPTE:
SE 5D 0000054 8F C3 017A 309 SUBL3 #21*4,FP,SP ;RESERVE FAO PARAMETER BUFFER
FC AD 5E D0 0182 310 MOVL SP,FAOARG(FP) ;AND SAVE ITS ADDRESS
FB AD 53 D0 0186 311 MOVL R3,PTEINDEX(FP) ;SAVE INDEX TO PTE
54 5E D0 018A 312 MOVL SP,R4 ;R4 USED TO STORE FAO PARAMS
018D 313 :
018D 314 : SET UP TO CONVERT VA, PTE, AND FORMATTED PTE
018D 315 :
53 84 52 D0 018D 316 MOVL R2,(R4)+ ;VIRTUAL ADDRESS
00 B543 D0 0190 317 MOVL @R5[R3],R3 ;R3 = PAGE TABLE ENTRY
07 12 0195 318 BNEQ 30$ ;BRANCH IF NOT DELETED
50 01 3C 0197 319 MOVZWL #$$$_NORMAL,R0 ;NO OUTPUT FOR 0 PTE'S
019A 320 NULLSTRING:
08 BC D4 019A 321 CLRL @ADRBYTECNT(AP) ;RETURN STRING IS 0 BYTES
04 019D 322 RET
019E 323 30$:
50 53 15 00 EF 019E 324 EXTZV #PTESV_PFN,#PTESS_PFN,R3,R0 ;R0 = PFN IF PRESENT
51 05 D0 01A3 325 MOVL #5,R1 ;ASSUME VALID PTE TYPE
84 53 D0 01A6 326 MOVL R3,(R4)+ ;CONVERT PTE IN HEX
09 18 01A9 327 BGEQ 45$ ;BRANCH IF NOT VALID
57 50 D1 01AB 328 CML R0,R7 ;LEGAL PFN?
1E 19 01AE 329 BLSS 60$ ;YES, VALID PAGE
51 D6 01B0 330 INCL R1 ;ASSUME IT'S AN I/O PAGE
17 11 01B2 331 BRB 50$ ;AND SAY NO PFN
01B4 332 45$:
51 53 01 16 EF 01B4 333 EXTZV #PTESV_TYPO,#1,R3,R1 ;FORM THE PTE TYPE CODE
03 53 1A E1 01B9 334 BBC #PTESV_TYP1,R3,40$ ;IF TYPE BIT 1 IS 0 BRANCH
51 02 C8 01BD 335 BISL #2,R1 ;SET HIGH ORDER TYPE BIT
01C0 336 40$:
51 D5 01C0 337 TSTL R1 ;TYPE 0 IS TRANSITION OR DZRO
07 12 01C2 338 BNEQ 50$ ;BRANCH IF NOT TYPE 0
50 D5 01C4 339 TSTL R0 ;PFN = 0 IF DZRO
06 12 01C6 340 BNEQ 60$ ;BRANCH IF TRANSITION
51 04 D0 01C8 341 MOVL #4,R1 ;TYPE CODE FOR DZRO
01CB 342 50$:
50 01 CE 01CB 343 MNEGL #1,R0 ;NO PFN IN THIS PTE
01CE 344 :
01CE 345 : R1 = PTE TYPE CODE, SEE TABLE, R0 = PFN OR -1 IF NONE
01CE 346 :
01CE 347 60$:
51 05 C4 01CE 348 MULL #5,R1 ;PTE TYPE CODE IS 5 CHARS WIDE
84 05 D0 01D1 349 MOVL #5,(R4)+ ;SIZE OF PTE TYPE STRING
84 FE6B CF41 9E 01D4 350 MOVAB PTETYPETBL[R1],(R4)+ ;ADR OF PTE TYPE STRING
51 7C 01DA 351 CLRQ R1 ;ASSUME NO MODIFY OR LOCK BITS
25 53 1F E1 01DC 352 BBC #PTESV_VALID,R3,70$ ;BRANCH IF PTE NOT VALID
51 53 01 1A EF 01E0 353 EXTZV #PTESV_MODIFY,#1,R3,R1 ;GET MODIFY BIT FROM PTE
1C 50 1F E0 01E5 354 BBS #31,R0,70$ ;BRANCH IF NO PFN
17 FC BD 1F E0 01E9 355 BBS #31,@FAOARG(FP),70$ ;BRANCH IF SYSTEM ADDRESS

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52 57 00' C5 01EE 356 MULL3 S^#PFNSC_WSLX,R7,R2 ;BYTE OFFSET TO WSLX ARRAY
      52 56 C0 01F2 357 ADDL R6,R2 ;BYTE ADDRESS OF WSLX ARRAY
      52 6240 3C 01F5 358 MOVZWL (R2)[R0],R2 ;WORKING SET LIST INDEX
      0A 13 01F9 359 BEQL 70$ ;BRANCH IF NOT A WSL INDEX
52 52 00 B542 D0 01FB 360 MOVL @(R5)[R2],R2 ;WORKING SET LIST ENTRY
52 52 01 05 EF 0200 361 EXTZV #WSLSV_WSLOCK,#1,R2,R2 ;WORKING SET LIST LOCK BIT
      0205 362 70$:
      84 84 01 D0 0205 363 MOVL #1,(R4)+ ;SIZE OF MODIFY STRING
84 FE5A CF41 9E 0208 364 MOVAB MODIFYTBL[R1],(R4)+ ;ADR OF MODIFY STRING
      84 01 D0 020E 365 MOVL #1,(R4)+ ;SIZE OF WRK SET LOCK STRNG
84 FE53 CF42 9E 0211 366 MOVAB WSLOCKTBL[R2],(R4)+ ;ADR OF WRK SET LOCK STRING
      0217 367
51 53 04 1B EF 0217 368 EXTZV #PTESV_PROT,#PTESS_PROT,R3,R1 ;R1 = PROTECTION CODE
      84 84 04 D0 021C 369 MOVL #4,(R4)+ ;SIZE OF PROTECTION STRING
84 FDDC CF41 DE 021F 370 MOVAL PROTECTIONTBL[R1],(R4)+ ;ADR OF PROTECTION STRING
      0225 371
51 53 02 17 EF 0225 372 EXTZV #PTESV_OWN,#PTESS_OWN,R3,R1 ;R1 = OWNER OF PTE
      84 84 01 D0 022A 373 MOVL #1,(R4)+ ;SIZE OF OWNER STRING
84 FE0E CF41 9E 022D 374 MOVAB OWNERTBL[R1],(R4)+ ;ADR OF OWNER STRING
      0233 375
      0233 376 ; NOW SET UP TO CONVERT THE PFN DATA BASE IF ANY
      0233 377
      FE34 CF DF 0233 378 PUSHAL PTECTL ;FORM CONTROL STRING DESCRIPTOR
      51 1D DD 0237 379 PUSHL #PTECTLSIZ ;ON THE STACK
50 50 5E D0 0239 380 MOVL SP,R1 ;R1 = ADDRESS OF STRING DESCR
      50 1F E0 023C 381 BBS #31,R0,80$ ;BRANCH IF NO PFN
      61 3A 9A 0240 382 MOVZBL #PFNCTLSIZ,(R1) ;INCLUDE PFN CONTROL STRING
52 57 00' C5 0243 383 MULL3 S^#PFNSC_STATE,R7,R2 ;BYTE OFFSET TO STATE ARRAY
      52 56 C0 0247 384 ADDL R6,R2 ;ADDRESS OF STATE ARRAY
      84 6240 9A 024A 385 MOVZBL (R2)[R0],(R4)+ ;STATE BYTE
52 57 00' C5 024E 386 MULL3 S^#PFNSC_TYPE,R7,R2 ;BYTE OFFSET TO TYPE ARRAY
      52 56 C0 0252 387 ADDL R6,R2 ;ADDRESS OF TYPE ARRAY
      84 6240 9A 0255 388 MOVZBL (R2)[R0],(R4)+ ;TYPE BYTE
52 57 00' C5 0259 389 MULL3 S^#PFNSC_REFCNT,R7,R2 ;BYTE OFFSET TO REFCNT ARRAY
      52 56 C0 025D 390 ADDL R6,R2 ;ADDRESS OF REFCNT ARRAY
      84 6240 3C 0260 391 MOVZWL (R2)[R0],(R4)+ ;REFERENCE COUNT
52 57 00' C5 0264 392 MULL3 S^#PFNSC_BAK,R7,R2 ;BYTE ADDRESS OF BACKING STORE ARRAY
      52 56 C0 0268 393 ADDL R6,R2 ;ADDRESS OF BACKING STORE ARRAY
      84 6240 D0 026B 394 MOVL (R2)[R0],(R4)+ ;BACKING STORE ADDRESS
52 57 00' C5 026F 395 MULL3 S^#PFNSC_PTE,R7,R2 ;BYTE OFFSET TO PTE ARRAY
      52 56 C0 0273 396 ADDL R6,R2 ;ADDRESS OF PTE ARRAY
      84 6240 D0 0276 397 MOVL (R2)[R0],(R4)+ ;PTE POINTER
52 57 00' C5 027A 398 MULL3 S^#PFNSC_BLINK,R7,R2 ;BYTE OFFSET TO BLINK ARRAY
      52 56 C0 027E 399 ADDL R6,R2 ;ADDRESS OF BLINK ARRAY
      84 6240 3C 0281 400 MOVZWL (R2)[R0],(R4)+ ;BACK LINK
52 57 00' C5 0285 401 MULL3 S^#PFNSC_FLINK,R7,R2 ;BYTE OFFSET TO FLINK ARRAY
      52 56 C0 0289 402 ADDL R6,R2 ;ADDRESS OF FLINK ARRAY
      84 6240 3C 028C 403 MOVZWL (R2)[R0],(R4)+ ;FORWARD LINK
      0290 404 80$:
      50 53 D0 0290 405 MOVL R3,R0 ;PAGE TABLE ENTRY CONTENTS
53 F8 AD D0 0293 406 MOVL PTEINDEX(FP),R3 ;INDEX TO PAGE TABLE ENTRY
50 00 B543 D1 0297 407 CMPL @(R5)[R3],R0 ;STILL THE SAME PTE?
      07 13 029C 408 BEQL 90$ ;BRANCH IF YES
      52 04 AC D0 029E 409 MOVL VA(AP),R2 ;MUST RETRY, GET VA
      FED5 31 02A2 410 BRW FORMATPTE ;START OVER AGAIN
      02A5 411 90$:
      02A5 412 $FAOL_S (R1),@ADRBYTECNT(AP),@OUTSTRING(AP),@FAOARG(FP)

```

PTEDUMP  
V04-000

- DUMP PTE AND PFN DATA BASE  
FORMAT THE PAGE TABLE ENTRY

L 13

16-SEP-1984 02:38:09 VAX/VMS Macro V04-00  
5-SEP-1984 03:46:50 [SYS.SRC]PTEDUMP.MAR;1

Page 11  
(6)

04	02B7	413	RET	
	02B8	414		
	02B8	415	.DSABL	LSB
	02B8	416		
	02B8	417		
	02B8	418	.END	

PTEDUMP  
Symbol table

- DUMP PTE AND PFN DATA BASE

M 13

16-SEP-1984 02:38:09 VAX/VMS Macro V04-00  
5-SEP-1984 03:46:50 [SYS.SRC]PTEDUMP.MAR;1

Page 12  
(6)

ADRBYTECNT	= 00000008		
FAOARG	= FFFFFFFC		
FORMATPTE	0000017A	R	02
MAXPAGCNT	= 0000001C		
MMGSC_SYSPHDLEN	*****	X	02
MMGSC_SYSPIX	*****	X	02
MMGSPTEDUMP	000000F2	RG	02
MMGSPTEDUMPHDR	000000A5	RG	02
MODIFYTBL	00000067	R	02
NULLSTRING	0000019A	R	02
OUTSTRING	= 0000000C		
OWNERTBL	00000040	R	02
PARAMCNT	= 00000000		
PCBSL_PHD	= 0000006C		
PFNSA_BASE	*****	X	02
PFNSC_BAK	*****	X	02
PFNSC_BLINK	*****	X	02
PFNSC_FLINK	*****	X	02
PFNSC_PTE	*****	X	02
PFNSC_REFCNT	*****	X	02
PFNSC_STATE	*****	X	02
PFNSC_TYPE	*****	X	02
PFNSC_WSLX	*****	X	02
PFNBASE	= 00000018		
PFNCTLSIZ	= 0000003A		
PHDSL_FREPOVA	= 00000028		
PHDSL_FREPIVA	= 00000030		
PHDADR	= 00000014		
PROCESSINDEX	= 00000010		
PROTECTIONTBL	00000000	R	02
PTESS_OWN	= 00000002		
PTESS_PFN	= 00000015		
PTESS_PROT	= 00000004		
PTESV_MODIFY	= 0000001A		
PTESV_OWN	= 00000017		
PTESV_PFN	= 00000000		
PTESV_PROT	= 0000001B		
PTESV_TYPO	= 00000016		
PTESV_TYPI	= 0000001A		
PTESV_VALID	= 0000001F		
PTEADR	= 00000010		
PTECTL	0000006B	R	02
PTECTLSIZ	= 0000001D		
PTEINDEX	= FFFFFFF8		
PTETYPETBL	00000044	R	02
SCHSAL_PCB	*****	X	02
SDASPTEDUMP	0000015D	RG	02
SGNSC_MAXPAGCNT	*****	X	02
SGNSC_PHDPAGCNT	*****	X	02
SGNSC_PTPAGCNT	*****	X	02
SSS_LENVID	= 0000018C		
SSS_NORMAL	= 00000001		
SYSSFAOL	*****	GX	02
VA	= 00000004		
VASS_VPN	= 00000015		
VASV_VPN	= 00000009		
WLSV_WSLOCK	= 00000005		

WSLOCKTBL

00000069 R 02

-----  
! Psect synopsis !  
-----

PSECT name	Allocation	PSECT No.	Attributes
. ABS .	00000000 ( 0.)	00 ( 0.)	NOPIC USR CON ABS LCL NOSHR NOEXE NORD NOWRT NOVEC BYTE
\$AB\$\$	00000000 ( 0.)	01 ( 1.)	NOPIC USR CCN ABS LCL NOSHR EXE RD WRT NOVEC BYTE
YEXEPAGED	000002B8 ( 696.)	02 ( 2.)	NOPIC USR CON REL LCL NOSHR EXE RD WRT NOVEC BYTE

-----  
! Performance indicators !  
-----

Phase	Page faults	CPU Time	Elapsed Time
Initialization	29	00:00:00.09	00:00:00.27
Command processing	105	00:00:00.59	00:00:01.23
Pass 1	271	00:00:07.35	00:00:08.63
Symbol table sort	0	00:00:01.19	00:00:01.22
Pass 2	86	00:00:01.65	00:00:01.82
Symbol table output	9	00:00:00.08	00:00:00.08
Psect synopsis output	2	00:00:00.02	00:00:00.02
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	504	00:00:10.99	00:00:13.28

The working set limit was 1500 pages.  
43385 bytes (85 pages) of virtual memory were used to buffer the intermediate code.  
There were 50 pages of symbol table space allocated to hold 788 non-local and 14 local symbols.  
418 source lines were read in Pass 1, producing 15 object records in Pass 2.  
15 pages of virtual memory were used to define 14 macros.

-----  
! Macro library statistics !  
-----

Macro library name	Macros defined
\$_\$255\$DUA28:[SYS.OBJ]LIB.MLB;1	5
\$_\$255\$DUA28:[SYSLIB]STARLET.MLB;2	6
TOTALS (all libraries)	11

845 GETS were required to define 11 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS\$:PTEDUMP/OBJ=OBJ\$:PTEDUMP MSRC\$:PTEDUMP/UPDATE=(ENH\$:PTEDUMP)+EXECMLS/LIB



001	002	003	004	005	006	007	008	009	010	011	012	013	014	015	016	017	018	019	020	021	022	023	024	025	026	027	028	029	030	031	032	033	034	035	036	037	038	039	040	041	042	043	044	045	046	047	048	049	050	051	052	053	054	055	056	057	058	059	060	061	062	063	064	065	066	067	068	069	070	071	072	073	074	075	076	077	078	079	080	081	082	083	084	085	086	087	088	089	090	091	092	093	094	095	096	097	098	099	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000
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