





```

0000 1 .TITLE dif$format_hex_octal format one line
0000 2 .IDENT /V04-000/
0000 3
0000 4 *****
0000 5
0000 6
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0000 24
0000 25 *****
0000 26
0000 27 ++
0000 28
0000 29 FACILITY: DCL Differences command
0000 30
0000 31 ABSTRACT: The DCL DIFFERENCES command compares the contents of
0000 32 two files.
0000 33
0000 34 ENVIRONMENT: VAX native, user mode
0000 35
0000 36 --
0000 37
0000 38 AUTHOR: Peter George, Benn Schreiber CREATION DATE: 1-August-1981
0000 39
0000 40 MODIFIED BY:
0000 41
0000 42 --
0000 43
00000000 44 .psect $code,exe,nowrt
0000 45
0000 46
0000 47 Format one line of hex or octal listing
0000 48
0000 49 Inputs:
0000 50
0000 51 4(ap) start of buffer to dump
0000 52 8(ap) number of entries per line
0000 53 12(ap) size of one entry
0000 54 16(ap) current index into buffer (used to print on side of li
0000 55 20(ap) number of entries left in buffer
0000 56 24(ap) 0>>longword, 1>>word, 2>>byte
0000 57 28(ap) fao control string descriptor

```

```

0000 58 : 32(ap) address of string descriptor for output buffer
0000 59 :
0000 60 :
003C 0000 61 .entry dif$format_hex_octal,^M<R2,R3,R4,R5>
0002 62
53 08 AC 7D 0002 63 movq 8(ap),r3 ;get entries per line in r3, size of
54 53 C4 0006 64 mull2 r3,r4 ;compute number of bytes this line
0009 65
10 AC DD 0009 66 pushl 16(ap) ;stack index to print on right hand
04 AC DD 000C 67 pushl 4(ap) ;stack buffer address
54 DD 000F 68 pushl r4 ;stack number of bytes
52 14 AC D0 0011 69 movl 20(ap),r2 ;get number of entries in line
08 AC 52 D1 0015 70 cmpl r2,8(ap) ;see if more than one line's worth
04 15 0019 71 bleq 10$ ;if leq no
52 08 AC D0 001B 72 movl 8(ap),r2 ;yes...use max for one line
51 04 AC D0 001F 73 10$: movl 4(ap),r1 ;copy input data pointer
50 18 AC D0 0023 74 movl 24(ap),r0 ;get/test field width
13 13 0027 75 beql longwords ;if eql then longwords
08 50 E8 0029 76 blbs r0,words ;branch if words
002C 77 :
002C 78 : push bytes onto stack
002C 79 :
002C 80 bytes:
7E 81 9A 002C 81 movzbl (r1)+,-(sp) ;stack one
FA 52 F5 002F 82 sobgtr r2,bytes
OD 11 0032 83 brb call_fao
0034 84 :
0034 85 : push the words onto the stack
0034 86 :
0034 87 words:
7E 81 3C 0034 88 movzwl (r1)+,-(sp) ;push one word
FA 52 F5 0037 89 sobgtr r2,words ;do them all
05 11 003A 90 brb call_fao ;go call fao
003C 91 :
003C 92 : push longwords onto the stack
003C 93 :
003C 94 longwords:
FB 81 DD 003C 95 pushl (r1)+ ;push one
52 F5 003E 96 sobgtr r2,longwords
0041 97 :
0041 98 : call $FAO
0041 99 :
0041 100 call_fao:
20 6E 9F 0041 101 pushab (sp) ;stack address of arg list
AC DD 0043 102 pushl 32(ap) ;stack output buffer descr. addr
6E DD 0046 103 pushl (sp) ;also for output width
1C AC DD 0048 104 pushl 28(ap) ;stack fao control string addr
00000000*GF 04 FB 004B 105 calls #4,g^sys$faol ;call sys$faol to format string
0052 106 ret
0053 107
0053 108 .end

```

DIFSFORMAT\_HEX\_OCTAL  
Symbol table

format one line

M 16

15-SEP-1984 23:46:29  
5-SEP-1984 13:31:37

VAX/VMS Macro V04-00  
[DIF.SRC]DIFHEXOCT.MAR;1

Page 3  
(1)

BYTES	0000002C	R	01
CALL FAO	00000041	R	01
DIFSFORMAT_HEX_OCTAL	00000000	RG	01
LONGWORDS	0000003C	R	01
SYSSFAOL	*****	X	01
WORDS	00000034	R	01

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

PSECT name	Allocation	PSECT No.	Attributes												
. ABS .	00000000 ( 0.)	00 ( 0.)	NOPIC USR	CON	ABS	LCL	NOSHR	NOEXE	NORD	NOWRT	NOVEC	BYTE			
\$CODE	00000053 ( 83.)	01 ( 1.)	NOPIC USR	CON	REL	LCL	NOSHR	EXE	RD	NOWRT	NOVEC	BYTE			

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

Phase	Page faults	CPU Time	Elapsed Time
Initialization	29	00:00:00.08	00:00:00.90
Command processing	124	00:00:00.55	00:00:04.09
Pass 1	66	00:00:00.43	00:00:02.46
Symbol table sort	0	00:00:00.00	00:00:00.00
Pass 2	36	00:00:00.28	00:00:01.64
Symbol table output	2	00:00:00.03	00:00:00.07
Psect synopsis output	1	00:00:00.02	00:00:00.03
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	261	00:00:01.39	00:00:09.24

The working set limit was 750 pages.  
1470 bytes (3 pages) of virtual memory were used to buffer the intermediate code.  
There were 10 pages of symbol table space allocated to hold 6 non-local and 1 local symbols.  
108 source lines were read in Pass 1, producing 14 object records in Pass 2.  
0 pages of virtual memory were used to define 0 macros.

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

Macro library name	Macros defined
_\$255\$DUA28:[SYSLIB]STARLET.MLB;2	0

0 GETS were required to define 0 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS\$:DIFHEXOCT/OBJ=OBJ\$:DIFHEXOCT MSRC\$:DIFHEXOCT/UPDATE=(ENH\$:DIFHEXOCT)

0102 AH-BT13A-SE  
VAX/VMS V4.0

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A grid of 10 columns and 10 rows of small, illegible text screens. Several larger, semi-transparent labels are overlaid on the grid:

- DIFDEF MDL (row 2, column 6)
- DIF (row 3, column 5)
- DIF MAP (row 4, column 5)
- XDSTRING LIS (row 5, column 4)
- DIFPRE REQ (row 6, column 6)
- DIFGETCMD LIS (row 7, column 6)
- DIFHEXOCT LIS (row 8, column 9)
- DATA LIS (row 9, column 6)
- XDELTA LIS (row 10, column 1)