



```

PPPPPPPP      LL      IIIIII      DDDDDDDD      AAAAAA      TTTTTTTTTT      EEEEEEEEEE
PPPPPPPP      LL      IIIIII      DDDDDDDD      AAAAAA      TTTTTTTTTT      EEEEEEEEEE
PP          PP   LL      II         DD          DD   AA          AA      TT         EE
PP          PP   LL      II         DD          DD   AA          AA      TT         EE
PP          PP   LL      II         DD          DD   AA          AA      TT         EE
PP          PP   LL      II         DD          DD   AA          AA      TT         EE
PPPPPPPP      LL      II         DD          DD   AA          AA      TT         EEEEEEEE
PPPPPPPP      LL      II         DD          DD   AA          AA      TT         EEEEEEEE
PP          LL      II         DD          DD   AAAAAAAAAA      TT         EE
PP          LL      II         DD          DD   AAAAAAAAAA      TT         EE
PP          LL      II         DD          DD   AA          AA      TT         EE
PP          LL      II         DD          DD   AA          AA      TT         EE
PP          LL      IIIIII      DDDDDDDD      AA          AA      TT         EEEEEEEEEE
PP          LL      IIIIII      DDDDDDDD      AA          AA      TT         EEEEEEEEEE

```

```

LL          IIIIII      SSSSSSSS
LL          IIIIII      SSSSSSSS
LL          II         SS
LL          II         SS
LL          II         SS
LL          II         SS
LL          II         SSSSSS
LL          II         SSSSSS
LL          II         SS
LL          II         SS
LL          II         SS
LL          IIIIII      SSSSSSSS
LL          IIIIII      SSSSSSSS

```



```
0000 1 .title plitime_date - pl1 runtime routines for date and time
0000 2 .ident /1-002/ ; Edit WHM1002
0000 3
0000 4 :*****
0000 5 :*
0000 6 :* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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0000 22 :* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
0000 23 :*
0000 24 :*
0000 25 :*****
0000 26 :
0000 27 :
0000 28 ++
0000 29 facility:
0000 30
0000 31 VAX/VMS pl1 runtime library.
0000 32
0000 33 abstract:
0000 34
0000 35 This module contains the pl1 runtime routines that format
0000 36 date and time
0000 37
0000 38 author:
0000 39 r. heinen 16-feb-1979
0000 40 modifications:
0000 41
0000 42
0000 43 1-002 Bill Matthews 29-September-1982
0000 44
0000 45 Invoke macros $defdat and rtshare instead of $defopr and share.
0000 46
0000 47 --
0000 48
0000 49
0000 50 external definitions
0000 51
0000 52
0000 53
0000 54 local data
0000 55
0000 56
0000 57 rtshare
```

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```

0000 59 .sbtll pli$date - return date
0000 60 :++
0000 61 : pli$date - routine to return date
0000 62 :
0000 63 : functional decription:
0000 64 :
0000 65 : This routine returns the date in YMMDD format.
0000 66 :
0000 67 : inputs:
0000 68 :
0000 69 :     r1 = address to return string - char(6)
0000 70 :
0000 71 : outputs:
0000 72 :
0000 73 :     string is returned.
0000 74 :--
0000 75 .entry pli$date,^m<r2,r3>
5E 0E 000C 0002 76 subl #14,sp ; allocate buffer
52 5E DO 0005 77 movl sp,r2 ; address buffer
53 51 DO 0008 78 movl r1,r3 ; save buffer address
50 82 3C 000B 79 $numtim_s timbuf= (r2) ; get the time
51 51 D4 0019 80 movzwl (r2)+,r0 ; get year
51 50 50 0000064 8F 7B 001B 81 clrl r1 ; setup quad word
51 82 3C 0024 82 ediv #100,r0,r0,r1 ; get remainder from 100
51 003F 30 0027 83 bsbw cvrt_two_char ; convert two characters
51 82 3C 002A 84 movzwl (r2)+,r1 ; get year
51 0039 30 002D 85 bsbw cvrt_two_char ; convert to 2 chars
51 82 3C 0030 86 movzwl (r2)+,r1 ; get day
0033 30 0030 87 bsbw cvrt_two_char ; convert
0034 88 ret ; done
0034 89 .sbtll pli$time - return time
0034 90 :++
0034 91 : pli$time - routine to return time
0034 92 :
0034 93 : functional decription:
0034 94 :
0034 95 : This routine returns the time in HHMMSS format.
0034 96 :
0034 97 : inputs:
0034 98 :
0034 99 :     r1 = address to return string - char(6)
0034 100 :
0034 101 : outputs:
0034 102 :
0034 103 :     string is returned.
0034 104 :--
5E 0E 000C 0034 105 .entry pli$time,^m<r2,r3>
52 0E C2 0036 106 subl #14,sp ; allocate buffer
52 5E DO 0039 107 movl sp,r2 ; address buffer
53 51 DO 003C 108 movl r1,r3 ; save buffer address
52 06 C0 004A 109 $numtim_s timbuf= (r2) ; get the time
51 82 3C 004D 110 addl #6,r2 ; point to time data
51 0013 30 0050 111 movzwl (r2)+,r1 ; get hour
51 82 3C 0053 112 bsbw cvrt_two_char ; convert two characters
51 000D 30 0056 113 movzwl (r2)+,r1 ; get minute
51 82 3C 0059 114 bsbw cvrt_two_char ; convert to 2 chars
0059 115 movzwl (r2)+,r1 ; get second

```

PLISTIME\_DATE  
1-002

B 14  
- pl1 runtime routines for date and tim 16-SEP-1984 02:16:50 VAX/VMS Macro V04-00  
plitime - return time 6-SEP-1984 11:37:25 [PLIRTL.SRC]PLIDATE.MAR;1

Page 3  
(1)

51	0007	30	005C	116	bsbw	cvrt_two_char	:	convert
	82	3C	005F	117	movzwl	(r2)+,r1	:	convert hundreths
	0001	30	0062	118	bsbw	cvrt_two_char	:	
		04	0065	119	ret		:	done

PLI  
1-0

```
0066 121      .sbttl subroutines
0066 122      :++
0066 123      : cvrt_two_char - convert number to two ascii characters
0066 124      :
0066 125      : inputs:
0066 126      :
0066 127      :     r1 = number to convert
0066 128      :     r3 = address to store data
0066 129      :
0066 130      : outputs:
0066 131      :
0066 132      :     r3 = updated address
0066 133      :--
0066 134      cvrt_two_char:
50   51   0A   C7 0066 135      divl3   #10,r1,r0      ; get tens digit
83   50   30   81 006A 136      addb3   #^a/0/,r0,(r3)+ ; insert character
      50   0A   C4 006E 137      mull   #10,r0      ;
      51   50   C2 0071 138      subl   r0,r1       ;
83   51   30   81 0074 139      addb3   #^a/0/,r1,(r3)+ ; remove tens value
      05   078 140      rsb      ; insert ones digit
0079 141      :
0079 142      .end
```

CVRT TWO\_CHAR 00000066 R 01  
 PLISDATE 00000000 RG 01  
 PLISTIME 00000034 RG 01  
 SYSSNUMTIM \*\*\*\*\* GX 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
_PLISCODE	00000079 ( 121.)	01 ( 1.)	PIC USR CON REL LCL SHR EXE RD NOWRT NOVEC LONG

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

Phase	Page faults	CPU Time	Elapsed Time
Initialization	9	00:00:00.06	00:00:00.37
Command processing	65	00:00:00.54	00:00:07.50
Pass 1	67	00:00:00.66	00:00:03.41
Symbol table sort	0	00:00:00.00	00:00:00.00
Pass 2	29	00:00:00.31	00:00:01.38
Symbol table output	0	00:00:00.02	00:00:00.01
Psect synopsis output	2	00:00:00.01	00:00:00.04
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	172	00:00:01.60	00:00:12.98

The working set limit was 750 pages.  
 2479 bytes (5 pages) of virtual memory were used to buffer the intermediate code.  
 There were 10 pages of symbol table space allocated to hold 4 non-local and 0 local symbols.  
 142 source lines were read in Pass 1, producing 14 object records in Pass 2.  
 3 pages of virtual memory were used to define 3 macros.

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

Macro library name	Macros defined
_\$255\$DUA28:[PLIRTL.OBJ]PLIRTMAC.MLB;1	1
_\$255\$DUA28:[SYSLIB]STARLET.MLB;2	2
TOTALS (all libraries)	3

16 GETS were required to define 3 macros.

There were no errors, warnings or information messages.

MACRO/ENABLE=SUPPRESSION/DISABLE=TRACEBACK/LIS=LISS:PLIDATE/OBJ=OBJ\$:PLIDATE MSRC\$:PLIDATE/UPDATE=(ENHS:PLIDATE)+LIBS:PLIRTMAC/LIB



0307 AH-BT13A-SE  
VAX/VMS V4.0

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A grid of 14 columns and 12 rows of terminal windows. Each window contains a different screen display from the LIS (Library Information System) software. The screens vary in content, including data tables, command prompts, and status messages. Several screens are clearly labeled with titles such as:

- PLIDELETE LIS
- PLIDATA LIS
- PLIENR LIS
- PLICONTROL LIS
- PLICURT LIS
- PLICUTPIC LIS
- PLIDATE LIS

The displays are arranged in a regular grid pattern, with each window occupying a fixed portion of the overall page. The text is small and dense, typical of a terminal window output from a mainframe or minicomputer system.