


```

CCCCCCCC 000000 NN NN VV VV LL IIIIII NN NN KK KK
CCCCCCCC 000000 NN NN VV VV LL IIIIII NN NN KK KK
CC        00      00 NN NN VV VV LL      NN NN KK KK
CC        00      00 NN NN VV VV LL      NN NN KK KK
CC        00      00 NNNN NN VV VV LL      NNNN NN KK KK
CC        00      00 NNNN NN VV VV LL      NNNN NN KK KK
CC        00      00 NN NN NN VV VV LL      NN NN KKKKKK
CC        00      00 NN NN NN VV VV LL      NN NN KKKKKK
CC        00      00 NN NNNN VV VV LL      NN NNNN KK KK
CC        00      00 NN NNNN VV VV LL      NN NNNN KK KK
CC        00      00 NN NN NN VV VV LL      NN NN KK KK
CC        00      00 NN NN NN VV VV LL      NN NN KK KK
CCCCCCCC 000000 NN NN VV VV LL      NN NN KK KK
CCCCCCCC 000000 NN NN VV VV LL      NN NN KK KK

```

```

RRRRRRRR EEEEEEEEE EEEEEEEEE QQQQQQ
RRRRRRRR EEEEEEEEE EEEEEEEEE QQQQQQ
RR        RR      EE        QQ      QQ
RR        RR      EE        QQ      QQ
RR        RR      EE        QQ      QQ
RRRRRRRR EEEEEEEEE QQQQQQ
RRRRRRRR EEEEEEEEE QQQQQQ
RR RR      EE        QQ QQ      QQ
RR RR      EE        QQ QQ      QQ
RR RR      EE        QQ QQ      QQ
RR RR      EEEEEEEEE QQQQ  QQ
RR RR      EEEEEEEEE QQQQ  QQ

```

.....

XTITLE 'VAX-11 CONVERT'

Version: 'V04-000'

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Facility: VAX-11 CONVERT
Abstract: Linkage definitions for the convert utilities
Environment:
VAX/VMS Operating System

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Author: Keith B Thompson Creation date: May-1982

Modified by:

- V03-002 KBT0477 Keith B. Thompson 29-Jan-1983
Add init_fast_load, load_secondary, extend_area,
check_key and load_key linkage
- V03-001 KBT0437 Keith B. Thompson 16-Dec-1982
Preserve R1 in get_vm and get_tmp_vm calls

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Linkages NOTE: By only using reg. 2-11 a normal JSB or CALLx link will preserve these registers.

Linkage naming convention:

| | |
|---------------------------|---|
| General Convert Linkage: | CLSlinkage |
| Reclaim specific linkage: | RLSlinkage |
| Add_key specific linkage: | ALSlinkage |
| Specific Routine Linkage: | CLSroutine_name, RLSroutine_name or ALSroutine_name |

Registers:

| | |
|---------|---|
| _REG_11 | 11 - KEY_DESC |
| _REG_10 | 11 - KEY_DESC 10 - CTX |
| _REG_9 | 11 - KEY_DESC 10 - CTX 9 - BUCKET |
| _REG_8 | 11 - KEY_DESC 10 - CTX 9 - BUCKET 8 - RECORD_CTRL (CL link) KEY_POINTER (RL link) |

LINKAGE

! Generic jsb link

| | |
|-------------------|--------------------------------------|
| CL\$JSB_LINK | = JSB, |
| CL\$JSB_LINK_ARG1 | = JSB (REGISTER = 1), |
| CL\$JSB_LINK_ARG2 | = JSB (REGISTER = 1,REGISTER = 2), |

! Convert

| | | |
|----------------|-----------------------------|---------|
| CL\$JSB_REG_11 | = JSB : GLOBAL(KEY_DESC | = 11), |
| CL\$JSB_REG_10 | = JSB : GLOBAL(CTX | = 10, |
| | KEY_DESC | = 11), |
| CL\$JSB_REG_9 | = JSB : GLOBAL(BUCKET | = 9, |
| | CTX | = 10, |
| | KEY_DESC | = 11), |
| CL\$JSB_REG_8 | = JSB : GLOBAL(RECORD_CTRL | = 8, |
| | BUCKET | = 9, |

CTX = 10,
KEY_DESC = 11),

! Reclaim linkages

RL\$JSB_REG_9 = JSB : GLOBAL(BUCKET = 9,
CTX = 10,
KEY_DESC = 11),

RL\$JSB_REG_8 = JSB : GLOBAL(KEY_POINTER = 8,
BUCKET = 9,
CTX = 10,
KEY_DESC = 11),

! Add_key linkages

AL\$JSB_REG_11 = JSB : GLOBAL(KEY_DESC = 11),

! Routine specific links

```

CLSALLOCATE_CTX      = JSB : GLOBAL( CTX      = 10 ),
CLSCOMPARE_KEY       = JSB ( REGISTER = 0,           ! Segment type
                          REGISTER = 1,           ! Segment size
                          REGISTER = 2,           ! New key seq.
                          REGISTER = 3 ),         ! Old key seq.

CLS_CONVERT_VBN_ID   = JSB : GLOBAL( SORT_VBN = 6, SORT_ID = 7 ),
CLSCOPY_KEY          = JSB : GLOBAL( RECORD_CTRL = 8,
                                      CTX      = 10,
                                      KEY_DESC = 11 ),

CLSCVT_TO_ASC        = JSB,
CLSEXTEND_AREA       = JSB,
CL$FAST_LOAD         = JSB : GLOBAL( KEY_DESC = 11 ),
CL$FREE_VM           = JSB,
CL$FREE_TEMP_VM      = JSB,
CL$GET_NEXT_KEY      = JSB : GLOBAL( KEY_DESC = 11 ),
CL$GET_RECORD        = JSB,
CL$GET_TEMP_VM       = JSB : PRESERVE ( 1 ),
CL$GET_VM            = JSB : PRESERVE ( 1 ),
CL$INIT_FAST_LOAD    = JSB : GLOBAL( BUCKET  = 9,
                                      CTX      = 10,
                                      KEY_DESC = 11 ),

CLSLOAD_SECONDARY    = JSB : GLOBAL( BUCKET  = 9,
                                      CTX      = 10,
                                      KEY_DESC = 11 ),

CLSLOAD_SIDR         = JSB : GLOBAL( CTX = 10 ),
CLSREAD_PROLOGUE     = JSB,
CL$SET_KEY_DESC      = JSB : GLOBAL( KEY_DESC = 11 ),
CL$SORT_PRIMARY      = JSB : GLOBAL( KEY_DESC = 11 ),
CL$SORT_SECONDARY    = JSB : GLOBAL( KEY_DESC = 11 ),
CL$WRITE_AREA_DESC   = JSB ( REGISTER = T ),
CL$WRITE_KEY_DESC    = JSB : GLOBAL( KEY_DESC = 11 ),

ALSCHECK_KEY        = JSB : GLOBAL( KEY_DESC = 11 ),
ALSLOAD_KEY         = JSB : GLOBAL( KEY_DESC = 11 );

```

! Global register definitions

! MACRO

! Global registers

```

DEFINE_KEY_DESC_GLOBAL = GLOBAL REGISTER
                        KEY_DESC          = 11 : REF BLOCK [ ,BYTE ]%,

DEFINE_CTX_GLOBAL       = GLOBAL REGISTER
                        CTX              = 10 : REF BLOCK [ ,BYTE ]%,

DEFINE_BUCKET_GLOBAL    = GLOBAL REGISTER
                        BUCKET          = 9 : REF BLOCK [ ,BYTE ]%,

DEFINE_KEY_POINTER_GLOBAL = GLOBAL REGISTER
                        KEY_POINTER     = 8%,

DEFINE_RECORD_CTRL_GLOBAL = GLOBAL REGISTER

```


