```
SSSSSSSSSSSS  UUU           UUU   MMM               MMM
SSSSSSSSSSSS  UUU           UUU   MMM               MMM
SSSSSSSSSSSS  UUU           UUU   MMM               MMM
SSS           UUU           UUU   MMMMMM       MMMMMM
SSS           UUU           UUU   MMMMMM       MMMMMM
SSS           UUU           UUU   MMMMMM       MMMMMM
SSS           UUU           UUU   MMM    MMM      MMM
SSS           UUU           UUU   MMM    MMM      MMM
SSS           UUU           UUU   MMM    MMM      MMM
   SSSSSSSSS  UUU           UUU   MMM               MMM
   SSSSSSSSS  UUU           UUU   MMM               MMM
   SSSSSSSSS  UUU           UUU   MMM               MMM
         SSS  UUU           UUU   MMM               MMM
         SSS  UUU           UUU   MMM               MMM
         SSS  UUU           UUU   MMM               MMM
         SSS  UUU           UUU   MMM               MMM
         SSS  UUU           UUU   MMM               MMM
         SSS  UUU           UUU   MMM               MMM
SSSSSSSSSSSS  UUUUUUUUUUUUUUUUU   MMM               MMM
SSSSSSSSSSSS  UUUUUUUUUUUUUUUUU   MMM               MMM
SSSSSSSSSSSS  UUUUUUUUUUUUUUUUU   MMM               MMM
```

```
SSSSSSS  UU      UU  MM      MM  DDDDDDD   EEEEEEEEEE  FFFFFFFFFF
SSSSSSS  UU      UU  MM      MM  DDDDDDD   EEEEEEEEEE  FFFFFFFFFF
SS       UU      UU  MMMM  MMMM  DD     DD  EE          FF
SS       UU      UU  MMMM  MMMM  DD     DD  EE          FF
SS       UU      UU  MM  MM  MM  DD     DD  EE          FF
SS       UU      UU  MM  MM  MM  DD     DD  EE          FF
SSSSSS   UU      UU  MM      MM  DD     DD  EEEEEEEE    FFFFFFFF
SSSSSS   UU      UU  MM      MM  DD     DD  EEEEEEEE    FFFFFFFF
     SS  UU      UU  MM      MM  DD     DD  EE          FF
     SS  UU      UU  MM      MM  DD     DD  EE          FF
     SS  UU      UU  MM      MM  DD     DD  EE          FF
     SS  UU      UU  MM      MM  DD     DD  EE          FF
SSSSSSS  UUUUUUUUUU  MM      MM  DDDDDDD   EEEEEEEEEE  FF
SSSSSSS  UUUUUUUUUU  MM      MM  DDDDDDD   EEEEEEEEEE  FF


MM      MM  AAAAAA    RRRRRRR
MM      MM  AAAAAA    RRRRRRR
MMMM  MMMM  AA    AA  RR    RR
MMMM  MMMM  AA    AA  RR    RR
MM  MM  MM  AA    AA  RR    RR
MM  MM  MM  AA    AA  RR    RR
MM      MM  AA    AA  RRRRRRR
MM      MM  AA    AA  RRRRRRR
MM      MM  AAAAAAAAAA  RR RR
MM      MM  AAAAAAAAAA  RR RR
MM      MM  AA    AA  RR  RR
MM      MM  AA    AA  RR  RR
MM      MM  AA    AA  RR    RR
MM      MM  AA    AA  RR    RR
```

```
; Version:      'V04-000'
;
;*******************************************************************************
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;*******************************************************************************
; Author:
;
;       R. Newland      16-NOV-1978
;
; Modified By:
;
;       V02-001 MTR0001         Mike Rhodes      21-Jan-1982
;                 Change buffer size to the current maximum of 255.
;
; *********************************************************************
;
;       S U M D E F . M A R
;
; *********************************************************************
; This module defines the offsets used in the Source Update
; Merge (SUM) modules.
;
;
;
; DEFINE SOURCE UPDATE MERGE FILE BLOCK OFFSETS
;
;
        .MACRO  DEFUPFBLK
;
        $NAMDEF                          ; Define RMS NAM block offsets
;
        $DEFINI UPF
;
$DEF    UPF_L_PTR       .BLKL   1        ; Linkage pointer
```

```
$DEF     UPF_W_LOC1      .BLKW   1       ; Locator-1
$DEF     UPF_W_LOC2      .BLKW   1       ; Locator-2
$DEF     UPF_B_FIFLAGS   .BLKB   1       ; File flags byte
$DEF     UPF_B_EDFLAGS   .BLKB   1       ; Edit flags word
$DEF     UPF_W_DOT       .BLKW   1       ; Dot value
$DEF     UPF_B_FILENO    .BLKB   1       ; File number
                         .BLKB   3       ; Spare
$DEF     UPF_Q_EDITS     .BLKQ   1       ; Edits list head
$DEF     UPF_Q_AUDDS     .BLKQ   1       ; Audit string descriptor
$DEF     UPF_Q_CMNT      .BLKQ   1       ; Comment descriptor
$DEF     UPF_T_AUDST     .BLKB   16      ; Audit string
$DEF     UPF_T_NAM       .BLKB   NAM$K_BLN ; RMS NAM block
$DEF     UPF_K_BLN               ; Length of UPF block
;
; File flags
;
_VIELD  UPF,0,< -
        <INIT,,M> -                      ; Edit list has been initialised
        >
;
        $DEFEND UPF
;
        DEFSUMFLG
;
        .MACRO  DEFUPFBLK
        .ENDM   DEFUPFBLK
;
        .ENDM   DEFUPFBLK
;
; Define SUM input stream flag bits
;
        .MACRO  DEFSUMFLG
;
_VIELD  SUM,0,< -
        <AUDIT,,M> -                     ; Audit trail is off/on
        <AUDITNEW,,M> -                  ; New audit trail
        <SRCUPD,,M> -                    ; Line is from source(0) or update(1)
        <SUBCLSH,,M> -                   ; 2nd or later clash of clash report
        <DELETE,,M> -                    ; Source line has deleted lines info
        >
;
        .MACRO  DEFSUMFLG
        .ENDM   DEFSUMFLG
;
        .ENDM   DEFSUMFLG
;
;
; Define input stream data block
;
        .MACRO  DEFISBLK
;
        $DEFINI IS
;
        $FABDEF                          ; Define RMS FAB offsets
;
$DEF    IS_L_FILELIST   .BLKL   1        ; Address of file list
```

```
$DEF     IS_B_STATE      .BLKB  1          ; Current state
$DEF     IS_B_PROCFLAGS  .BLKB  1          ; Procedure flags
$DEF     IS_W_LINE_NO    .BLKW  1          ; Source file line number
$DEF     IS_L_OPEN_FILE  .BLKL  1          ; UPF address of currently open file
$DEF     IS_L_CONN_FILE  .BLKL  1          ; UPF address of currently connected file
$DEF     IS_L_EDIT_BLK   .BLKL  1          ; Current edit block address
$DEF     IS_L_FIRST_EDIT .BLKL  1          ; First edit block in range of edits
$DEF     IS_L_LAST_EDIT  .BLKL  1          ; Last edit block in range of edits
$DEF     IS_L_MAIN_FAB   .BLKL  1          ; Address of main program FAB
$DEF     IS_L_MAIN_RAB   .BLKL  1          ; Address of main program RAB
$DEF     IS_W_MAIN_RFA   .BLKW  3          ; Source file RFA
$DEF     IS_B_FLAGS      .BLKB  1          ; Input stream flags
                         .BLKB  1          ; Spare
$DEF     IS_W_HIGH_LOC2  .BLKW  1          ; Highest loc-2 during update check
$DFF     IS_W_INSERT_NO  .BLKW  1          ; Count of insert lines
$DEF     IS_W_DELETES    .BLKW  1          ; Number of deleted lines
$DEF     IS_T_FAB        .BLKB  FAB$K_BLN  ; FAB block
$DEF     IS_K_BLN                          ; Length of IS block
;
         $DEFEND IS
;
         .MACRO  DEFISBLK
         .ENDM   DEFISBLK
;
         .ENDM   DEFISBLK
;
;
;
;
;
;
; Define edit node offsets
;
         .MACRO  DEFEDBLK
;
         $DEFINI ED
;
$DEF     ED_L_FWD        .BLKL  1          ; List head forward pointer
$DEF     ED_L_BWD        .BLKL  1          ; List head backword pointer
$DEF     ED_W_LOC1       .BLKW  1          ; Locator-1
$DEF     ED_W_LOC2       .BLKW  1          ; Locator-2
$DEF     ED_W_LINES      .BLKW  1          ; Number of insert lines
$DEF     ED_W_RFA        .BLKB  6          ; Record file address
$DEF     ED_L_FILE       .BLKL  1          ; File block pointer
$DEF     ED_B_FLAGS      .BLKB  1          ; Edit flags byte
$DEF     ED_B_FILENO     .BLKB  1          ; Number of file
$DEF     ED_K_BLN                          ; Length of edit block
;
; Edit flags
;
_VIELD  ED,0,< -
        <SUPPRESS,,M> -                    ; Suppress clash message
        <SEQERR,,M> -                      ; Edit was out of sequence
        >
;
         $DEFEND ED
;
         .MACRO  DEFEDBLK
```

```
        .ENDM   DEFEDBLK
;
        .ENDM   DEFEDBLK
;
;
; Define command type bits
;
        .MACRO  DEFCMDTYPE
;
_VIELD  CMD,0,< -
        <CMND,,M> -                     ; Line is command
        <EDTRM,,M> -                    ; Command is edit terminator
        <EDEND,,M> -                    ; Edit terminator is end of edit
        >
;
        CMD_M_ALL = CMD_M_CMND ! CMD_M_EDTRM ! CMD_M_EDEND
;
        .MACRO  DEFCMDTYPE
        .ENDM   DEFCMDTYPE
;
        .ENDM   DEFCMDTYPE
;
;
; Macro to define SUM control block offsets
;
        .MACRO  DEFSUMCBL
;
        $DEFINI SUM
;
$DEF    SUM_L_STS       .BLKL   1       ; Return status (also in R0)
$DEF    SUM_L_ISDATA    .BLKL   1       ; Address if input stream data block
$DEF    SUM_Q_AUDDS     .BLKQ   1       ; Descriptor of current audit string
$DEF    SUM_Q_FILESP    .BLKQ   1       ; Descriptor of update file name
$DEF    SUM_W_LINE_NO   .BLKW   1       ; Source file line number
$DEF    SUM_W_INSERT_NO .BLKW   1       ; Insert number
$DEF    SUM_B_FLAGS     .BLKB   1       ; Flags byte
$DEF    SUM_K_BLN                       ; Length of SUM control block
;
        $DEFEND SUM
;
        DEFSUMFLG
;
        $SUMMSGDEF
;
;
        .MACRO  DEFSUMCBL
        .ENDM   DEFSUMCBL
;
        .ENDM   DEFSUMCBL
;
;
; Macro to define SUMSLP flags long-word bits
;
        .MACRO  DEFSSLFLG
;
```

```
_VIELD   SSL,0,< -
         <OUTPUT,,M> -                        ; Edit output required
         <MODE,,M> -                          ; Operational mode -- 0:edit 1:command
         <LIST,,M> -                          ; Edit listing required
         <HEADER,,M> -                        ; Edit output requires RHB information
         <FORMFEED,,M> -                      ; Record was a form-feed
         >
;
         .MACRO  DEFSSLFLG
         .ENDM   DEFSSLFLG
;
         .ENDM   DEFSSLFLG
;
;
; Macro to define SUMSLP general definitions
;
         .MACRO  DEFSSLGEN
;
SSL$BUFSZE          = 255                      ; Buffer size
SSL$FILSZE          = 64                       ; File name size
SSL$RHBSZE          = 12                       ; Record header buffer size
SSL$AUTSZE          = 16                       ; Audit trail string size
SSL$LNOSZE          = 6                        ; Line number field size
SSL$AULSZE          = 24                       ; Total szie of audit and line number
;
         .MACRO  DEFSSLGEN
         .ENDM   DEFSSLGEN
;
         .ENDM   DEFSSLGEN
;
;
; Macro to define SUMSLP record header buffer
;
         .MACRO  DEFSSLRHB
;
         $DEFINI SHB
;
SHB_K_AUDSZ = 8                                ; Audit trail size in VFC header

$DEF     SHB_W_LINE_NO   .BLKW   1      ; Line number
$DEF     SHB_W_INSERT_NO .BLKW   1      ; Insert number
$DEF     SHB_T_AUDIT     .BLKB   SHB_K_AUDSZ ; Audit trail
$DEF     SHB_K_BLN                            ; Length of SUMSLP record header buffer
;
         $DEFEND SHB
;
         .MACRO  DEFSSLRHB
         .ENDM   DEFSSLRHB
;
         .ENDM   DEFSSLRHB
```