

DDDDDDDDDDDD		CCCCCCCCCCCC	XXX		XXX
DDDDDDDDDDDD		CCCCCCCCCCCC	XXX		YXX
DDDDDDDDDDDD		CCCCCCCCCCCC	XXX		XXX
DDD	DDD	CCC	XXX		XXX
DDD	DDD	CCC	XXX		XXX
DDD	DDD	CCC	XXX		XXX
DDD	DDD	CCC	XXX		XXX
DDD	DDD	CCC		XXX	XXX
DDD	DDD	CCC		XXX	XXX
DDD	DDD	CCC		XXX	XXX
DDD	DDD	CCC		XXX	XXX
DDD	DDD	CCC		XXX	XXX
DDD	DDD	CCC		XXX	XXX
DDD	DDD	CCC		XXX	XXX
DDD	DDD	CCC		XXX	XXX
DDD	DDD	CCC		XXX	XXX
DDD	DDD	CCC		XXX	XXX
DDD	DDD	CCC		XXX	XXX
DDD	DDD	CCC		XXX	XXX
DDDDDDDDDDDD		CCCCCCCCCCCC	XXX		XXX
DDDDDDDDDDDD		CCCCCCCCCCCC	XXX		XXX
DDDDDDDDDDDD		CCCCCCCCCCCC	XXX		XXX



DCX Private Structure Definitions  
Version 'V04-000'

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MODIFIED BY:

V03-001 DWT0078 David W. Thiel 22-Feb-1983  
Add ANLSL\_RATIO\_NUM and ANLSL\_RATIO\_DENOM fields to  
the ANL structure.

\$STRUCT DCXPRV  
C <DCX  
EOR,256 : End of record character  
CHARS,257 : Number of distinct characters  
MAX\_CHAR,256 : Highest character value  
ANL\_MAXDEP,8 : Maximum analysis tree depth  
MAX\_SEGS,1024 : Maximum analysis segments  
>  
E

DCX internal context control block

\$STRUCT CTX  
F SIZE,L : Length of context block  
F TYPE,B : Block type  
C <  
ANLYZ : Data analysis context  
CMPRS : Data compression context  
EXPND : Data expansion context

```

>
F      .B,3           ; Spare
FC     VERSION,W     ; Version number
C      <
        VERSION,0    ; Current version
>
F      .W           ; Spare
FC     SANITY,L      ; Sanity check word
C      <
        SANITY,1328643173 ; Sanity check value
>
F      MAP          ; Address of map
LF     FIXED_LEN    ; Fixed length
FE     SPECIFIC,L   ; Beginning of type specific area
E

$STRUCT ANL
F      OPTIONS,L    ; Options from caller
V      <
        BOUNDED      ; Only analyzed data can be compressed
        ONE_PASS     ; Only one analysis pass allowed
        EST_BYTES    ; Estimated Data Bytes specified
        EST_RECS     ; Estimated Data Records specified
>
F      D_BYTES,L    ; Data Bytes
FF     D_RECS,L     ; Data Records
FF     EST_D_BYTES,L ; Estimated Data Bytes
FF     EST_D_RECS,L ; Estimated Data Records
FF     DEPTH,B      ; Depth of tree
FF     .B           ; Spare
FF     NSEGS,W      ; Number of segments allocated
FS     QUEUE,Q      ; Segment queue header
SS     FLINK,,L     ; Address of first queue entry
SS     BLINK,,L     ; Address of last queue entry
FF     RATIO_NUM,L  ; Numerator of observed to actual data ratio
FF     RATIO_DENOM,L ; Denominator of observed to actual data ratio
LE     LENGTH      ; Data analysis context length
E

$STRUCT ANLSEG
F      QUEUE,Q      ; Queue entry -- list of segments
S      FLINK,,L     ; Forward link in list of segments
S      BLINK,,L     ; Backward link in list of segments
F      SIZE,L      ; Length of segment
F      ID,W        ; Segment ID number
F      CHAR,W      ; Character preceding this segment
F      ACTIVE,W    ; Number of unique characters seen
F      ACTIVE_R,W  ; Above, excluding end-of-record char
F      DEPTH,B     ; Depth of this segment
F      MIN_CHAR,B  ; Smallest character seen
FF     MAX_CHAR,B  ; Largest character seen
FF     ESCAPE,B    ; Escape character
FF     FLAGS,B     ; Segment flags
V      <
        TENT       ; Tentative segment
        SOLID      ; Solid segment

```

```

REPEAT      : Repeated character case
ESCAPE     : Escape cell valid
BASE       : Base segment
UNBOUNDED  : Unbounded encoding
>
F           : Spare
F           : Maximum code length
F           : Number of sub-segments
F           : Map segment size
F           : Pointer to parent segment
F           : Bits of compressed data
F           : Adjusted bits of compressed data
F           : Total characters counted here
F           : Encoded string
F           : Character frequency array
C           : Length of count array
C           : Next segment pointer array
C           : Length of next segment array
L           : Segment length
E

$STRUCT CMP
F           : Segment queue header
S           : Forward link in segment queue
S           : Backward link in segment queue
L           : Data compression context length
E

$STRUCT CMPSEG
F           : Queue entry
S           : Forward link in queue
S           : Backward link in queue
F           : Length of segment
F           : Pointer to map segment
F           : Next segment pointers
C           : Length of next segment array
F           : Addresses of encoding strings
C           : Length of encoding strings array
L           : Segment fixed length
E

$STRUCT EXP
F           : Pointer to array of map segment addresses
L           : Data expansion specific length
E

```

The image displays a grid of 100 terminal windows, arranged in 10 rows and 10 columns. Each window shows a different screen from the VAX/VMS V4.0 system. The screens are text-based and contain various types of information, including:

- Status Reports:** Such as 'STATUS LIS' in the second row, second column.
- Diagnostic Tools:** Like 'ANALYZE LIS' in the third row, seventh column.
- Configuration Utilities:** Such as 'DCXMSG LIS' in the third row, eighth column.
- System Output:** Like 'SYSOUTPUT LIS' in the fifth row, sixth column.
- Resource Management:** Such as 'DCXPRVDEF MDL' in the sixth row, seventh column.
- File Operations:** Like 'STATEMENT LIS' in the seventh row, first column.
- Compression:** Such as 'COMPRESS LIS' in the seventh row, eighth column.
- Transfer:** Like 'TRANSFER LIS' in the seventh row, tenth column.
- Symbol Tables:** Such as 'SYMBOL LIS' in the eighth row, second column.
- Mapping:** Like 'DCXSHR MAP' in the eighth row, seventh column.
- Subsystems:** Such as 'SUBS LIS' in the eighth row, ninth column.

Other visible titles include 'STACINT LIS', 'PREFIX REQ', 'DCXDEF MDL', 'EXPAND LIS', 'DCX', and 'DCXMSG LIS'. The screens typically feature a header area with a title and a main area with text, often organized in columns or rows. Some screens show data in a table-like format with multiple columns.