UDD - DASD Display Utility (Control User)

The UDD utility program enables the terminal user to obtain a display of the contents of any record on any DASD device.

A display of record information is requested by specifying the absolute address where the information is to be found. Note that the display is given in both hexadecimal and character format.

This chapter covers the following topics:

- Command Format
- Header Record Display
- Data Record Display
- Modifying Disk Address

Command Format

Record information can be displayed with UDD only if the absolute address (cylinder, track, record) for the desired information is known. This information can be obtained using the online utility programs UDS and UPDS in MVS or USERV in VSE. Once this information is known, the record contents can be displayed with the command format:

```
*UDD cuu|vvvvvv cccchhhhrr|pbn
```

where:

cuu	Specifies the CUU address of the DASD device containing the record to be displayed where: c — channel number uu — unit address In MVS/XA systems, specifies the three-digit hexadecimal device number.
vvvvvv	Specifies the six-character volume serial number of the desired volume (which can replace the value CUU).

plus, for CKD devices:

cccc	Specifies the hexadecimal cylinder number of the cylinder containing the desired record.
hhhh	Specifies the hexadecimal head number (track number) of the track within the cylinder containing the desired record.
rr	Specifies the hexadecimal record number of the desired record on the track previously identified.

plus, FBA devices:

pbn	Specifies the hexadecimal six-digit Physical Block Number of the desired record.

The UDD utility program is fully conversational. Once a record has been displayed, additional records can be displayed by modifying the character string displayed as the first line at the terminal:

```
cuu vvvvvv cccchhhhrr pbn
```

The information displayed at the terminal consists of a maximum of 23 lines plus a header record. Each data line displays 32 characters of data in hexadecimal format and the translated 16 characters in decimal format. Each header line identifies the CUU address of the disk on which the data set resides, the volume serial number of the disk, and the record count/PBN information.

Header Record Display

The format of the header record is:

```
cuu COUNT=cccchhhhrrkkllll vvvvvv
```

or

```
cuu PBN=pbn vvvvvv
```

where:

cuu	Specifies the CUU address of the disk volume.
COUNT=	Is a constant indicating that the following information is count information.
cccc	Specifies the hexadecimal cylinder number.
hhhh	Specifies the hexadecimal track number.
rr	Specifies the hexadecimal record number.
kk	Specifies the hexadecimal key length.
llll	Specifies the hexadecimal record length.
vvvvvv	Specifies the volume identification number.
pbn	Specifies the six-digit hexadecimal Physical Block Number.

Data Record Display

Execution of the UDD program creates a display showing both the header record and the data portion of the desired information. The following figure illustrates a typical display as a result of executing UDD. Note the header record on line one.

```
468 COUNT=00D0000001080100   DISK01
0000 4040404040404040 4040404040404040  *               *
0010 4040404040C7D9D6 E4D740C6C9C5D3C4  *     GROUP FIELD*
0020 E240C1D9C540D9C5 E3D9C9C5E5C5C440  *S ARE RETRIEVED *
0030 C2E2404040404040 4040404040404040  *               *
0040 4040404040404040 F0F0F1F3F9F2F0F0  *        00139200*
0050 4040404040404040 4040404040404040  *               *
0060 4040404040404040 40D6D5C5407CD6C3  *         ONE Ú§OC*
0070 C3E4D9D9C9D5C761 E2C5D3C5D4C5D5E3  *CURRING/SELEMENT*
0080 61E2C17C7C404040 4040404040404040  */SAÚ§Ú§           *
0090 4040404040404040 F0F0F1F3F9F3F0F0  *        00139300*
00A0 4040404040404040 4040404040404040  *               *
00B0 4040404040C6C9C5 D3C440C6D6D3D3D6  *     FIELD FOLLO*
00C0 E6C5C440C2E840D6 D5C5404040404040  *WED BY ONE      *
00D0 4040404040404040 4040404040404040  *               *
00E0 4040404040404040 F0F0F1F3F9F4F0F0  *00139400        *
00F0 4040404040404040 4040404040404040  *               *
0100 4040404040404040 407CD6C3C3E4D9D9  *         Ú§OCCURR*
0110 C9D5C761E2C5D3C5 D4C5D5E361E2C27C  *ING/SELEMENT/SBÚ§*
0120 7C40C6C9C5D3C440 4040404040404040  *Ú§ FIELD         *
0130 4040404040404040 F0F0F1F3F9F5F0F0  *        00139500*
0140 4040404040404040 4040404040404040  *               *
0150 4040404040C6D6D9 40C140E3D6E3C1D3  *     FOR A TOTAL*
0160 40D6C640C6C9C6E3 E840D6C3C3E4D9D9  * OF FIFTY OCCURR*
```

In this display, cylinders and tracks are numerically addressed relative to zero. The data lines are numbered according to their hexadecimal addresses relative to zero. The hexadecimal addresses for each data line appear in the left margin of the display.

On any given record display, if the contents of the record do not fit on one screen page, press ENTER to scroll down. When the end of the record is reached, the final display is:

END OF REC cccchhhhrrkkllllpbn

where the definition of the character string is the same as that for the header record described above. To find the next record, enter another UDD display request.

Note that error messages can appear while using UDD. These normally occur because either the call to UDD was entered with an invalid format or a ’no record found’ condition was encountered. In this case, reenter the call or adjust the cylinder, head, and/or record data.

Modifying Disk Address

Once a record has been displayed, the disk address can be manipulated using the terminal’s Program Function (PF) keys. These keys alter the current disk address as follows:

CKD	PFK	FBA
Add 1 to the current cylinder.	1	Add 352 to the pbn.
Add 1 to the current head.	2	Add 32 to the pbn.
Add 1 to the current record.	3	Add 1 to the pbn.
Subtract 1 from the current cylinder.	4	Subtract 352 from the pbn.
Subtract 1 from the current head.	5	Subtract 32 from the pbn.
Subtract 1 from the current record.	6	Subtract 1 from the pbn.

Note:
Altering the current cylinder resets the current head to zero and the current record to one. Altering the current head resets the current record to one.

Example

A data set on disk volume DISK01 is believed to contain erroneous data. The volume resides on the device whose CUU is 350. The record believed to be in error is located at record one on track five of cylinder three. To display the desired record, enter:

```
*UDD 3500003000501
```

The following figure illustrates the resulting display.

```
350 COUNT=0003000501080100   DISK01
0000 4040404040404040 4040404040404040 *                *
0010 4040404040C7D9D6 E4D740C6C9C5D3C4 *     GROUP FIELD*
0020 E240C1D9C540D9C5 E3D9C9C5E5C5C440 *S ARE RETRIEVED *
0030 C2E2404040404040 4040404040404040 *AS              *
0040 4040404040404040 F0F0F1F3F9F2F0F0 *        00139200*
0050 4040404040404040 4040404040404040 *                *
0060 4040404040404040 40D6D5C5407CD6C3 *         ONE Ú§OC*
0070 C3E4D9D9C9D5C761 E2C5D3C5D4C5D5E3 *CURRING/SELEMENT*
0080 61E2C17C7C404040 4040404040404040 */SAÚ§Ú§           *
0090 4040404040404040 F0F0F1F3F9F3F0F0 *        00139300*
00A0 4040404040404040 4040404040404040 *                *
00B0 4040404040C6C9C5 D3C440C6D6D3D3D6 *     FIELD FOLLO*
00C0 E6C5C440C2E840D6 D5C5404040404040 *WED BY ONE      *
00D0 4040404040404040 4040404040404040 *                *
00E0 4040404040404040 F0F0F1F3F9F4F0F0 *00139400        *
00F0 4040404040404040 4040404040404040 *                *
0100 4040404040404040 407CD6C3C3E4D9D9 *         Ú§OCCURR*
0110 C9D5C761E2C5D3C5 D4C5D5E361E2C27C *ING/SELEMENT/SBÚ§*
0120 7C40C6C9C5D3C440 4040404040404040 *Ú§ FIELD         *
0130 4040404040404040 F0F0F1F3F9F5F0F0 *        00139500*
0140 4040404040404040 4040404040404040 *                *
0150 4040404040C6D6D9 40C140E3D6E3C1D3 *     FOR A TOTAL*
0160 40D6C640C6C9C6E3 E840D6C3C3E4D9D9 * OF FIFTY OCCURR*
```

Press ENTER to display the remaining portion of the records.