z/OS

IBM

Documentation Updates for APAR PI66986: CWI __CEEKHDP2() enhancement

Contents

About this information

This document provides specific updates for the z/OS V2R1 Vendor Interfaces, as required by APAR PI66986.

Technical updates are indicated by a vertical bar to the left of the change. (You might also notice revision bars for other unrelated technical updates that occur in the vicinity of the updates for this APAR.)

Part 1. Updates for z/OS Language Environment Vendor Interfaces

This part contains updates to the information in *z/OS Language Environment Vendor Interfaces* (SA38-0688).

CEEKHDP2 (also known as __CEEKHDP2) -- hexadecimal dump service

This low-level service dumps a section of storage in both hex and character representations. It contains protection against addresses that are not valid.

Syntax

#include <__le_cwi.h>

void __CEEKHDP2 (char *title*, int32_t *title_length*, void ** *start_address*, void **address*, int32_t *length*, int32_t *line_content*, _FEED_BACK *fc*);

title **(input)**
A fixed-length character string that identifies the displayed storage section.

title_length **(input)**
A fullword binary integer containing the length of the title. The maximum length is 60 characters.

start_address **(input)**
A pointer to the start of storage to be displayed.

address **(input)**
A pointer to the first byte of storage to be dumped.

length **(input)**
A fullword binary integer containing the length of the storage area. The offset, refer to item 3 in Figure 1 on page 5, presented in the report is automatically adjusted according to the input length.

1. If length is less than or equal to 0x10000, 4 hexadecimal characters are used to present the offset from the first byte of the dump.

2. If length is less than or equal to 0x1000000, and larger than 0x10000, 6 hexadecimal characters are used to present the offset from the first byte of the dump.

3. For length larger than 0x1000000, 8 hexadecimal characters are used to present the offset from the first byte of the dump.

line_content **(input)**
A fullword binary integer containing the format of line content:

2   Eight words without translation

3   Four words with translation

4   Four words without translation

fc **(output/optional)**

Specifies an optional 16-byte condition token, passed by reference, where the CWI will place a feedback code.

This parameter is not truly optional in some programming languages, like C, where a NULL pointer must be used to indicate that the parameter has not been specified.

If this parameter is omitted and the CWI needs to return a feedback code other than CEE000, the CWI will "raise" this feedback code as an error condition.

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__CEEKHDP2()

The following feedback codes may be returned by this CWI:

Condition	Description category	Description value
CEE000	Severity	0
	Msg_No	N/A
	Message	The service completed successfully.
CEE30T	Severity	2
	Msg_No	3101
	Message	The title string was longer than 132 characters and was truncated.
CEE30V	Severity	3
	Msg_No	3103
	Message	An error occurred in writing messages to the dump file.
CEE313	Severity	3
	Msg_No	3107
	Message	Dump terminated before all storage could be dumped because inaccessible storage was encountered.

Lines in the dump contain the format as shown below:

```
            1          2                         5                        6
            |          |                         |                        |
            v          v                         v                        v
Title(00000004089100E8)
        +0000 00000004089100E8   000001F0 00001F00 00000000 00000000  |...0............|
        +0010 00000004089100F8   00000001 08FC74B0 00000000 00000000  |................|
        +0020 0000000408910108   00000000 00000000 00000000 00000000  |................|
        +0030 0000000408910118 - +00014F 0000000108910207                same as above
                   |          |
                   v          v
                   3          4
```
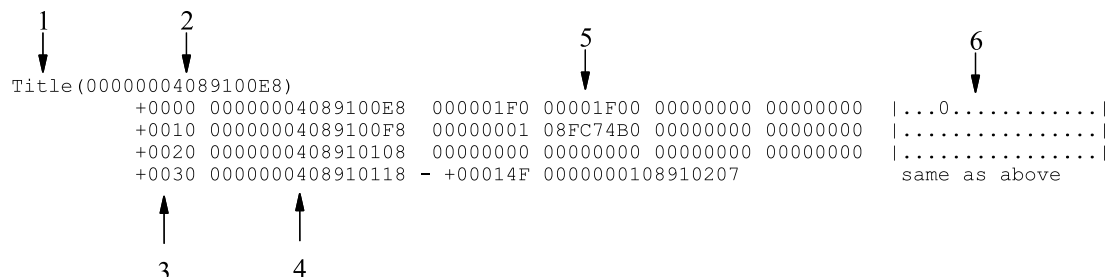
Figure 1. Dump format

1. The string given on the title argument. The string is truncated if it is too long to fit on a single dump line.
2. The starting address of this section of storage.
3. The offset in hexadecimal from the first byte of the dump.
4. The hexadecimal address of the first byte dumped on the line.
5. 4 bytes of storage dumped as 8 single hexadecimal numbers.
6. The storage dumped in character form. Any byte values between X'00' and X'3F' are displayed as periods, however.

Usage Notes:
1. If an address that is not valid is detected, the following message is displayed instead of the storage contents: Inaccessible storage.
2. CEEKHDP2 suppresses multiple lines of identical data, as CEEKVDMP does.

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