

OpenEuler kdump

```
percpu: Embedded 20 pages/cpu s41400 r8192 d32328 u81920
Kernel command line: rw console=ttyS0 irqpoll nr_cpus=1 reset_devices novmcoredd noinitrd
Misrouted IRQ fixup and polling support enabled
[ 0.000000] percpu: Embedded 20 pages/cpu s41400 r8192 d32328 u81920
[ 0.000000] Kernel command line: root=/dev/vda rw console=ttyS0 crashkernel=128M
[ 0.000000] Dentry cache hash table entries: 262144 (order: 8, 2087152 bytes, linear)
```

- 在 `/etc/sysconf/kdump` 种cmdline参数加上 `root=/dev/vda`, crash kernel就成功boot了。。。。😂

```
# NOTE: some arguments such as crashkernel will always be removed
KDUMP_COMMANDLINE_REMOVE="hugepages hugepagesz slub_debug quiet"

# This variable lets us append arguments to the current kdump commandline
# after processed by KDUMP_COMMANDLINE_REMOVE
KDUMP_COMMANDLINE_APPEND="root=/dev/vda rw console=ttyS0 irqpoll nr_cpus=1 reset_devices novmcoredd noinitrd"

# Any additional kexec arguments required. In most situations, this should
```

生成在规定目录的vmcore

```
[root@openeuler-riscv64 crash]# tree .
.
|-- 2024-05-17-02:07
|   |-- vmcore
|   |-- vmcore
|-- 2024-05-17-03:17
|   |-- vmcore
|   |-- vmcore
3 directories, 2 files
```

- 用crash查看vmcore, 好像没什么反应。。。

```
[root@openeuler-riscv64 2024-05-17-03:17]# crash /root/vmlinux vmcore
crash 8.0.2-4.oe2309
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Copyright (C) 2004, 2005, 2006, 2010 IBM Corporation
Copyright (C) 1999-2006 Hewlett-Packard Co
Copyright (C) 2005, 2006, 2011, 2012 Fujitsu Limited
Copyright (C) 2006, 2007 VA Linux Systems Japan K.K.
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Copyright (C) 1999, 2002, 2007 Silicon Graphics, Inc.
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This program has absolutely no warranty. Enter "help warranty" for details.

^C
^C^C[root@openeuler-riscv64 2024-05-17-03:17]# crash /root/vmlinux vmcore
crash 8.0.2-4.oe2309
Copyright (C) 2002-2022 Red Hat, Inc.
Copyright (C) 2004, 2005, 2006, 2010 IBM Corporation
Copyright (C) 1999-2006 Hewlett-Packard Co
Copyright (C) 2005, 2006, 2011, 2012 Fujitsu Limited
Copyright (C) 2006, 2007 VA Linux Systems Japan K.K.
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```

- kernel debug related config

```
.config -- Linux/riscv 6.8.0 Kernel Configuration
```

```

Symbol: DEBUG_INFO [=y]
Type : bool
Defined at lib/Kconfig.debug:227
Selected by [y]:
- DEBUG_INFO_DWARF4 [=y] && <choice> && (ICC_IS_CLANG [=n] || AS_IS_LLVM [=n] || AS_IS_GNU [=y] && AS_VERSION [=23900]>=2350
Selected by [n]:
- DEBUG_INFO_DWARF_TOOLCHAIN_DEFAULT [=n] && <choice> && (ICC_IS_CLANG [=n] || AS_IS_LLVM [=n] || CLANG_VERSION [=0]<140000
- DEBUG_INFO_DWARF5 [=n] && <choice> && (ICC_IS_CLANG [=n] || AS_IS_LLVM [=n] || AS_IS_GNU [=y] && AS_VERSION [=23900]>=2350

Symbol: DEBUG_INFO_BTf [=n]
Type : bool
Defined at lib/Kconfig.debug:375
Prompt: Generate BTf typeinfo
Depends on: DEBUG_INFO [=y] && !DEBUG_INFO_SPLIT [=n] && !DEBUG_INFO_REDUCED [=n] && (ICC_PLUGIN_RANDOMSTRUCT [=n] || COMPILE
Location:
-> Kernel hacking
-> Compile-time checks and compiler options
(1) -> Generate BTf typeinfo (DEBUG_INFO_BTf [=n])

Symbol: DEBUG_INFO_BTf_MODULES [=n]
Type : bool
Defined at lib/Kconfig.debug:406
Depends on: DEBUG_INFO [=y] && DEBUG_INFO_BTf [=n] && MODULES [=y] && PAHOLE_HAS_SPLIT_BTf [=y]

Symbol: DEBUG_INFO_COMPRESSED_NONE [=y]
Type : bool
Defined at lib/Kconfig.debug:323
Prompt: Don't compress debug information
Depends on: <choice>
Location:
-> Kernel hacking
-> Compile-time checks and compiler options
-> Compressed debug information (<choice> [=y])
(2) -> Don't compress debug information (DEBUG_INFO_COMPRESSED_NONE [=y])

Symbol: DEBUG_INFO_COMPRESSED_ZLIB [=n]
Type : bool
Defined at lib/Kconfig.debug:328
Prompt: Compress debugging information with zlib
Depends on: <choice>
Location:
-> Kernel hacking
-> Compile-time checks and compiler options
-> Compressed debug information (<choice> [=y])
(3) -> Compress debugging information with zlib (DEBUG_INFO_COMPRESSED_ZLIB [=n])

Symbol: DEBUG_INFO_COMPRESSED_ZSTD [=n]
Type : bool
Defined at lib/Kconfig.debug:343
Prompt: Compress debugging information with zstd
Depends on: n
Location:
-> Kernel hacking
-> Compile-time checks and compiler options
-> Compressed debug information (<choice> [=y])
(4) -> Compress debugging information with zstd (DEBUG_INFO_COMPRESSED_ZSTD [=n])

Symbol: DEBUG_INFO_DWARF4 [=y]
Type : bool
Defined at lib/Kconfig.debug:270
Prompt: Generate DWARF Version 4 debuginfo
Depends on: <choice> && (ICC_IS_CLANG [=n] || AS_IS_LLVM [=n] || AS_IS_GNU [=y] && AS_VERSION [=23900]>=23502)
Location:
-> Kernel hacking
-> Compile-time checks and compiler options
-> Debug information (<choice> [=y])
(5) -> Generate DWARF Version 4 debuginfo (DEBUG_INFO_DWARF4 [=y])
Selects: DEBUG_INFO [=y]

Symbol: DEBUG_INFO_DWARF5 [=n]
Type : bool
Defined at lib/Kconfig.debug:282
Prompt: Generate DWARF Version 5 debuginfo
Depends on: <choice> && (ICC_IS_CLANG [=n] || AS_IS_LLVM [=n] || AS_IS_GNU [=y] && AS_VERSION [=23900]>=23502 && AS_HAS_NON_
Location:
-> Kernel hacking
-> Compile-time checks and compiler options
-> Debug information (<choice> [=y])
(6) -> Generate DWARF Version 5 debuginfo (DEBUG_INFO_DWARF5 [=n])
Selects: DEBUG_INFO [=y]

Symbol: DEBUG_INFO_DWARF_TOOLCHAIN_DEFAULT [=n]
Type : bool
Defined at lib/Kconfig.debug:258
Prompt: Rely on the toolchain's implicit default DWARF version
Depends on: <choice> && (ICC_IS_CLANG [=n] || AS_IS_LLVM [=n] || CLANG_VERSION [=0]<140000 || AS_IS_GNU [=y] && AS_VERSION [
Location:
-> Kernel hacking
-> Compile-time checks and compiler options
-> Debug information (<choice> [=y])
(7) -> Rely on the toolchain's implicit default DWARF version (DEBUG_INFO_DWARF_TOOLCHAIN_DEFAULT [=n])
Selects: DEBUG_INFO [=y]

Symbol: DEBUG_INFO_NONE [=n]
Type : bool
Defined at lib/Kconfig.debug:252
Prompt: Disable debug information
Depends on: <choice>
Location:
-> Kernel hacking
-> Compile-time checks and compiler options
-> Debug information (<choice> [=y])
(8) -> Disable debug information (DEBUG_INFO_NONE [=n])

Symbol: DEBUG_INFO_REDUCED [=n]
Type : bool
Defined at lib/Kconfig.debug:303
Prompt: Reduce debugging information
Depends on: DEBUG_INFO [=y]
Location:
-> Kernel hacking
-> Compile-time checks and compiler options
(9) -> Reduce debugging information (DEBUG_INFO_REDUCED [=n])

```

