

Contents

Archived

Purpose

It can often be useful when debugging the kernel to be able to print the stack (and call trace) in the Linux kernel. While you could force a kernel panic to make this happen that is often less than desirable. Instead you would want to use the `dump_stack()` function which will give you a call trace. This function is not enabled in the default kernel and must be enabled. This article will cover how to enable and use the `dump_stack()` function.

Enabling in Kernel Config

To enable the `dump_stack()` function in the kernel config the following options must be set. You can use *make menuconfig* or *make xconfig* to do this.

1. Kernel hacking -> Kernel debugging
2. Kernel hacking -> Verbose kernel error messages

Enabling these two options will change the `dump_stack()` function from a do nothing function to dumping the stack.

You need to rebuild your Linux kernel image after enabling these options.

Using `dump stack()`

Using the `dump_stack()` function is as easy as calling `dump_stack()` wherever you wish to print out the stack. This will cause a stack trace to be printed at that point.

Conclusion

This is a useful way to print out the stack while leaving the kernel unharmed.

Archived

Sitara Linux SDK 08.00.00.00 (http://processors.wiki.ti.com/index.php/?title=Enabling_Stack_Dumping_in_Linux_Kernel&oldid=198215)

1. switchcategory:MultiCore= - For technical support on MultiCore devices, please post your questions in the C6000 MultiCore Forum - For questions related to the BIOS MultiCore SDK (MCSDK), please use the BIOS Forum	Keystone= - For technical support on MultiCore devices, please post your questions in the C6000 MultiCore Forum - For questions related to the BIOS MultiCore SDK (MCSDK), please use the BIOS Forum	C2000=For technical support on the C2000 please post your questions on The C2000 Forum. Please post only comments about the article Enabling Stack Dumping in Linux Kernel here.	DaVinci=For technical support on DaVincoplease post your questions on The DaVinci Forum. Please post only comments about the article Enabling Stack Dumping in Linux Kernel here.	MSP430=For technical support on MSP430 please post your questions on The MSP430 Forum. Please post only comments about the article Enabling Stack Dumping in Linux Kernel here.	OMAP35x=For technical support on OMAP please post your questions on The OMAP Forum. Please post only comments about the article Enabling Stack Dumping in Linux Kernel here.	OMAPL1=For technical support on OMAP please post your questions on The OMAP Forum. Please post only comments about the article Enabling Stack Dumping in Linux Kernel here.	MAVRK=For technical support on MAVRK please post your questions on The MAVRK Toolbox Forum. Please post only comments about the article Enabling Stack Dumping in Linux Kernel here.
---	--	---	--	--	---	--	---

Links



Wireless Connectivity

Retrieved from "https://processors.wiki.ti.com/index.php?title=Enabling_Stack_Dumping_in_Linux_Kernel&oldid=198218"

This page was last edited on 22 April 2015, at 11:32.

Content is available under [Creative Commons Attribution-ShareAlike](#) unless otherwise noted.