

# LKCD Installation and Configuration



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## About This Lesson

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**Purpose** This lesson describes how to install and configure the **Linux Kernel Crash Dump facility (LKCD)**.

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**What is not covered** This lesson will not describe how to use LKCD tools to analyze a Linux crash dump. It will tell you how to obtain a crash dump for later analysis.

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**Prerequisites** You need to know how to build, install and boot a Linux kernel.

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# The Crash Dump Process

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**Introduction** The process used by the LKCD to create a crash dump is discussed in this section.

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**Process** The process to obtain a crash dump involves two stages. In *stage one*, the contents of the systems memory is copied into a temporary disk location called a dump device. In *stage two*, Linux is booted and the memory image previously saved in the dump device is moved to a permanent location in the directory */var/log/dump*. Both the locations of the dump device and the dump directory are configurable.

System in production

Crash dump requested





# Selecting a Dump Device

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**Introduction**      When configuring LKCD you must select a disk partition to be used as a

## Selecting a Dump Device, Continued

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### **Finding a partition**

Available disk partitions and sizes may be listed using the command:

# Configuration Options

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## **Introduction**

are available to you. This section discusses these options.

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## Configuration Options,

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**Options**      ....Continued

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|---------------|--|---|
|               |  |   |
| DUMP_FLAGS    | Flag parameters to use when configuring system dumps.<br>In version 4 the only valid settings are:<br>0 - No flags are required.<br>1 - Non-disruptive, do not reboot after dumping; continue running. | 0 |
| DUMP_COMPRESS | Indicates which compression mechanism the kernel should attempt to use for compression (see below for more on dump compression).   | 0 |
| PANI_TIMEOUT  | Represents the timeout (in seconds) before r after a   |   |







## Installing LKCD,

# Installing LKCD, Continued

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# Testing Your LKCD Installation

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**Introduction** Once you have installed and configured LKCD it is important to verify that a crash dump can be taken. This section describes a procedure to test the LKCD installation.

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**Warning** Forcing a crash dump will cause the system to crash. Insure that all



## Verifying a Crash Dump, Continued