

## Linux Kernel Debugging (LFD445)

**You will learn techniques for local debugging by configuring a system (physical or virtual) for remote debugging from a second system and working with the basic components of the Linux kernel that underlie the built-in debugging frameworks.**

**Duration:** 3 Days

### Prerequisites for this course

To make the most of this course, you should:

- Be proficient in the C programming language.
- Be familiar with basic Linux (UNIX) utilities such as ls, grep and tar.
- Be comfortable using any of the available text editors (e.g. emacs, vi, etc.).
- Experience with any major Linux distribution is helpful but not strictly required.
- Have experience equivalent to having taken Linux Kernel Internals and Development (LFD420).

### Outline for this course

Chapter 1 – Course Introduction

Chapter 2 - Preliminaries

Chapter 3 - How to Work in OSS Projects \*\*

Chapter 4 - Kernel Features

Chapter 5 - Kernel Deprecated Interfaces

Chapter 6 - Printk

Chapter 7 - Monitoring and Debugging

Chapter 8 – Ftrace

Chapter 9 – Kernel and git Bisection

Chapter 10 - Kernel Development Tools

Chapter 11 – Perf, kprobes

Chapter 12 - gdb Kernel Scripts

Chapter 15 - Linux Kernel Debugging Tools

Chapter 16 - Linux Security Modules

Chapter 17 - Crash

Chapter 18 - kexec