DESCRIPTION

This book provides thorough knowledge of Linux TCP/IP stack and kernel framework for its network stack, including complete knowledge of design and implementation. Starting with simple client-server socket programs and progressing to complex design and implementation of TCP/IP protocol in Linux, this book provides different aspects of socket programming and major TCP/IP related algorithms. In addition, the text features netfilter hook framework, a complete explanation of routing sub-system, IP QOS implementation, and Network Soft IRQ. This book further contains elements on TCP state machine implementation, TCP timer implementation on Linux, TCP memory management on Linux, and debugging TCP/IP stack using lcrash.

ABOUT THE AUTHOR

Sameer Seth works at Juniper Networks as Senior Staff Engineer for JUNOS Kernel Team. Previously, he was a senior engineer at Sun Microsystems, where he worked on the TCP/IP stack in Solaris, sockets, streams, NFS, and related kernel framework. He has ten years of experience working with Linux in research and commercial environments. He has also worked on embedded TCP/IP Linux stack as well as on X86 architectures. Additionally, he has worked on different communication protocols on Motorola MPC8260 processors. His community work includes blogging for opensolaris technology (blogs.sun.com/sameer) and he delivers technical talks on open solaris technology. In his spare time he enjoys writing and talking on technical topics related to networking and Unix.
M. Ajaykumar Venkatesulu is currently working on networking and naming services. He has seven years of experience with Linux networking and kernel in research and commercial environments. His areas of interest include Linux kernel, embedded systems, IP routing, and IP QoS.