UNIX System Administration Handbook
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Last month I reviewed MVS Systems Programming. This month we’re going to review the UNIX System Administration Handbook. Next month I plan to review a Windows System Administration book (title TBD). That list should pretty much cover the major systems in place today (there does not seem to be a way to compare market share of each system, since there is no common way to establish measures to compare).

"The UNIX System Administrators Handbook is an attempt to condense everything that a system administrator should know about UNIX into a single easy-to-use volume" according to Dennis Ritchie, AT&T Bell Labs (one of the creators of UNIX).

The presentation is chronological; topics are introduced in the order that you would probably want to activate them in a new system. Part I (Chapters 1 – 6) is present in a sequence you would find useful if you are bringing up a new system straight from the packing crate. Part II (Chapters 7 - 14) introduce the various kinds of hardware that one typically used with UNIX and discusses how to install, configure, and operate this equipment. Part III (Chapters 15-19) discuss five important UNIX software subsystems: electronic mail, telephone communications, network news, backups and accounting. Part IV (Chapters 20 - 26) represents a grad-bag of UNIX topics to complete the material.

UNIX Systems Administration Handbook begins with some advice for systems administrators – sort of a “setting the stage for the job”. It lays out 5 fundamentals for systems administrators, and then provides 11 tasks a system administrator typically performs (perhaps providing the framework for a job description?).

Part I covers the bare metal approach to system administration (though installing the UNIX system is not covered specifically). Such topics as startup and shutdown; supervisor privileges; pseudo users (system accounts); users and files; file systems; starting and stopping and setting priority for processes; handling internal system communications (signals); and adding new users is addressed.

Part II gets closer to the metal by addressing drivers and devices; installing hardware; configuring parameter files for hardware and software; configuring the kernel; installing terminals and modems; installing printers and printing services; adding a disk; hardware maintenance tips; and networking.

Part III was covered above.

Part IV completes the basic knowledge base by discussing daemons (continuously running processes performing system tasks); periodic scheduled processes; disk storage allocation to users (quotas); system process limits; monitoring the system activity; security; and local system documentation.

There are 17 appendices that address a variety of topics and present sample parameter files.

The Bibliography includes 20 entries to suggest further study of the topic of UNIX System Administration.
A good supplemental reference book for UNIX commands and utilities is **UNIX System V Bible: Commands and Utilities** by Stephen Prata and Donald Martin. And of course – for your particular system - there is always the system manuals and the on-line help system (the "man" command).

Obviously, each chapter contains a lot more details to get UNIX systems up and running and keep them running. That’s why you should buy this book.