

Pengantar

I. Permulaan

1. Pengenalan

1.1 Ringkasan

1.2 Selamat datang di FreeBSD!

1.3 Mengenai Proyek FreeBSD

2. Instalasi FreeBSD

- 2.1 Sinopsis
- 2.2 Kebutuhan Hardware
- 2.3 Pre-installation Tasks
- 2.4 Memulai Instalasi
- 2.5 Pengenalan Sysinstall
- 2.6 Allocating Disk Space
- 2.7 Memilih Apa Yang Ingin di-Install
- 2.8 Memilih Media Instalasi
- 2.9 Melakukan Instalasi
- 2.10 Pasca Instalasi
- 2.11 Pemecahan Masalah
- 2.12 Panduan Instalasi Mahir
- 2.13 Menyiapkan Media Instalasi Sendiri

3. UNIX Basics

- 3.1 Synop
- 3.2 Virtual Consoles and Terminals
- 3.3 Permissions
- 3.4 Directory Structure
- 3.5 Disk Organization
- 3.6 Mounting and Unmounting File Systems
- 3.7 Processes
- 3.8 Daemons, Signals, and Killing Processes
- 3.9 Shells
- 3.10 Text Editors
- 3.11 Devices and Device Nodes
- 3.12 Binary Formats
- 3.13 For More Information

4. Installing Applications: Packages and Ports

- 4.1 Synopsis
- 4.2 Overview of Software Installation
- 4.3 Finding Your Application
- 4.4 Using the Packages System
- 4.5 Using the Ports Collection
- 4.6 Post-installation Activities
- 4.7 Dealing with Broken Ports

5 The X Window System

- 5.1 Synopsis
- 5.2 Understanding X
- 5.3 Installing X11
- 5.4 X11 Configuration
- 5.5 Using Fonts in X11
- 5.6 The X Display Manager
- 5.7 Desktop Environments

II. Common Tasks

6 Desktop Applications

- 6.1 Synopsis
- 6.2 Browsers
- 6.3 Productivity
- 6.4 Document Viewers
- 6.5 Finance
- 6.6 Summary

7 Multimedia

- 7.1 Synopsis
- 7.2 Setting Up the Sound Card
- 7.3 MP3 Audio
- 7.4 Video Playback
- 7.5 Setting Up TV Cards
- 7.6 Image Scanners

8 Configuring the FreeBSD Kernel

- 8.1 Synopsis
- 8.2 Why Build a Custom Kernel?

- 8.3 Finding the System Hardware
- 8.4 Building and Installing a Custom Kernel
- 8.5 The Configuration File
- 8.6 If Something Goes Wrong

9 Printing

- 9.1 Synopsis
- 9.2 Introduction
- 9.3 Basic Setup
- 9.4 Advanced Printer Setup
- 9.5 Using Printers
- 9.6 Alternatives to the Standard Spooler
- 9.7 Troubleshooting

10 Linux Binary Compatibility

- 10.1 Synopsis
- 10.2 Installation
- 10.3 Installing Mathematica®
- 10.4 Installing Maple™
- 10.5 Installing MATLAB®
- 10.6 Installing Oracle®
- 10.7 Installing SAP® R/3®
- 10.8 Advanced Topics

III. System Administration

11 Configuration and Tuning

- 11.1 Synopsis
- 11.2 Initial Configuration
- 11.3 Core Configuration
- 11.4 Application Configuration
- 11.5 Starting Services
- 11.6 Configuring the cron Utility
- 11.7 Using rc under FreeBSD
- 11.8 Setting Up Network Interface Cards
- 11.9 Virtual Hosts
- 11.10 Configuration Files
- 11.11 Tuning with sysctl
- 11.12 Tuning Disks
- 11.13 Tuning Kernel Limits
- 11.14 Adding Swap Space
- 11.15 Power and Resource Management

11.16 Using and Debugging FreeBSD ACPI

12 The FreeBSD Booting Process

- 12.1 Synopsis
- 12.2 The Booting Problem
- 12.3 The Boot Manager and Boot Stages
- 12.4 Kernel Interaction During Boot
- 12.5 Device Hints
- 12.6 Init: Process Control Initialization
- 12.7 Shutdown Sequence

13 Users and Basic Account Management

- 13.1 Synopsis
- 13.2 Introduction
- 13.3 The Superuser Account
- 13.4 System Accounts
- 13.5 User Accounts
- 13.6 Modifying Accounts
- 13.7 Limiting Users
- 13.8 Groups

14 Security

- 14.1 Synopsis
- 14.2 Introduction
- 14.3 Securing FreeBSD
- 14.4 DES, Blowfish, MD5, and Crypt
- 14.5 One-time Passwords
- 14.6 TCP Wrappers
- 14.7 KerberosIV
- 14.8 Kerberos5
- 14.9 OpenSSL
- 14.10 VPN over IPsec
- 14.11 OpenSSH
- 14.12 File System Access Control Lists
- 14.13 Monitoring Third Party Security Issues
- 14.14 FreeBSD Security Advisories
- 14.15 Process Accounting

15 Jails

- 15.1 Synopsis
- 15.2 Terms Related to Jails
- 15.3 Introduction

- 15.4 Creating and Controlling Jails
- 15.5 Fine Tuning and Administration
- 15.6 Application of Jails

16 Mandatory Access Control

- 16.1 Synopsis
- 16.2 Key Terms in this Chapter
- 16.3 Explanation of MAC
- 16.4 Understanding MAC Labels
- 16.5 Planning the Security Configuration
- 16.6 Module Configuration
- 16.7 The MAC bsdextended Module
- 16.8 The MAC ifoff Module
- 16.9 The MAC portacl Module
- 16.10 The MAC partition Module
- 16.11 The MAC Multi-Level Security Module
- 16.12 The MAC Biba Module
- 16.13 The MAC LOMAC Module
- 16.14 Nagios in a MAC Jail
- 16.15 User Lock Down
- 16.16 Troubleshooting the MAC Framework

17 Security Event Auditing

- 17.1 Synopsis
- 17.2 Key Terms in this Chapter
- 17.3 Installing Audit Support
- 17.4 Audit Configuration
- 17.5 Administering the Audit Subsystem

18 Storage

- 18.1 Synopsis
- 18.2 Device Names
- 18.3 Adding Disks
- 18.4 RAID
- 18.5 USB Storage Devices
- 18.6 Creating and Using Optical Media (CDs)
- 18.7 Creating and Using Optical Media (DVDs)
- 18.8 Creating and Using Floppy Disks
- 18.9 Creating and Using Data Tapes
- 18.10 Backups to Floppies
- 18.11 Backup Strategies
- 18.12 Backup Basics
- 18.13 Network, Memory, and File-Backed File Systems
- 18.14 File System Snapshots

- 18.15 File System Quotas
- 18.16 Encrypting Disk Partitions
- 18.17 Encrypting Swap Space

19 GEOM: Modular Disk Transformation Framework

- 19.1 Synopsis
- 19.2 GEOM Introduction
- 19.3 RAID0 - Striping
- 19.4 RAID1 - Mirroring
- 19.5 GEOM Gate Network Devices
- 19.6 Labeling Disk Devices
- 19.7 UFS Journaling Through GEOM

20 The Vinum Volume Manager

- 20.1 Synopsis
- 20.2 Disks Are Too Small
- 20.3 Access Bottlenecks
- 20.4 Data Integrity
- 20.5 Vinum Objects
- 20.6 Some Examples
- 20.7 Object Naming
- 20.8 Configuring Vinum
- 20.9 Using Vinum for the Root Filesystem

21 Virtualization

- 21.1 Synopsis
- 21.2 FreeBSD as a Guest OS
- 21.3 FreeBSD as a Host OS

22 Localization - I18N/L10N Usage and Setup

- 22.1 Synopsis
- 22.2 The Basics
- 22.3 Using Localization
- 22.4 Compiling I18N Programs
- 22.5 Localizing FreeBSD to Specific Languages

23 The Cutting Edge

- 23.1 Synopsis
- 23.2 FreeBSD-CURRENT vs. FreeBSD-STABLE

- 23.3 Synchronizing Your Source
- 23.4 Rebuilding "world"
- 23.5 Tracking for Multiple Machines

IV. Network Communication

24 Serial Communications

- 24.1 Synopsis
- 24.2 Introduction
- 24.3 Terminals
- 24.4 Dial-in Service
- 24.5 Dial-out Service
- 24.6 Setting Up the Serial Console

25 PPP and SLIP

- 25.1 Synopsis
- 25.2 Using User PPP
- 25.3 Using Kernel PPP
- 25.4 Troubleshooting PPP Connections
- 25.5 Using PPP over Ethernet (PPPoE)
- 25.6 Using PPP over ATM (PPPoA)
- 25.7 Using SLIP

26 Electronic Mail

- 26.1 Synopsis
- 26.2 Using Electronic Mail
- 26.3 sendmail Configuration
- 26.4 Changing Your Mail Transfer Agent
- 26.5 Troubleshooting
- 26.6 Advanced Topics
- 26.7 SMTP with UUCP
- 26.8 Setting Up to Send Only
- 26.9 Using Mail with a Dialup Connection
- 26.10 SMTP Authentication
- 26.11 Mail User Agents
- 26.12 Using fetchmail
- 26.13 Using procmail

27 Network Servers

- 27.1 Synopsis

- 27.2 The inetd “Super-Server”
- 27.3 Network File System (NFS)
- 27.4 Network Information System (NIS/YP)
- 27.5 Automatic Network Configuration (DHCP)
- 27.6 Domain Name System (DNS)
- 27.7 Apache HTTP Server
- 27.8 File Transfer Protocol (FTP)
- 27.9 File and Print Services for Microsoft® Windows® clients (Samba)
- 27.10 Clock Synchronization with NTP

28 Firewalls

- 28.1 Introduction
- 28.2 Firewall Concepts
- 28.3 Firewall Packages
- 28.4 The OpenBSD Packet Filter (PF) and ALTQ
- 28.5 The IPFILTER (IPF) Firewall
- 28.6 IPFW

29 Advanced Networking

- 29.1 Synopsis
- 29.2 Gateways and Routes
- 29.3 Wireless Networking
- 29.4 Bluetooth
- 29.5 Bridging
- 29.6 Link Aggregation and Failover
- 29.7 Diskless Operation
- 29.8 ISDN
- 29.9 Network Address Translation
- 29.10 Parallel Line IP (PLIP)
- 29.11 IPv6
- 29.12 Asynchronous Transfer Mode (ATM)
- 29.13 Common Access Redundancy Protocol (CARP)

V. Appendices

A. Obtaining FreeBSD

- A.1 CDRom and DVD Publishers
- A.2 FTP Sites
- A.3 Anonymous CVS
- A.4 Using CTM
- A.5 Using CVSup
- A.6 Using Portsnap
- A.7 CVS Tags

- A.8 AFS Sites
- A.9 rsync Sites

B. Bibliography

- B.1 Books & Magazines Specific to FreeBSD
- B.2 Users' Guides
- B.3 Administrators' Guides
- B.4 Programmers' Guides
- B.5 Operating System Internals
- B.6 Security Reference
- B.7 Hardware Reference
- B.8 UNIX® History
- B.9 Magazines and Journals

C. Resources on the Internet

- C.1 Mailing Lists
- C.2 Usenet Newsgroups
- C.3 World Wide Web Servers
- C.4 Email Addresses
- C.5 Shell Accounts

D. PGP Keys

- D.1 Officers
- D.2 Core Team Members
- D.3 Developers

FreeBSD Glossary

Index

Colophon

erwer

List of Figures

- 2-1. FreeBSD Boot Loader Menu
- 2-2. Typical Device Probe Results

- 2-3. Selecting Country Menu
- 2-4. Select Sysinstall Exit
- 2-5. Selecting Usage from Sysinstall Main Menu
- 2-6. Selecting Documentation Menu
- 2-7. Sysinstall Documentation Menu
- 2-8. Sysinstall Main Menu
- 2-9. Sysinstall Keymap Menu
- 2-10. Sysinstall Main Menu
- 2-11. Sysinstall Options
- 2-12. Begin Standard Installation
- 2-13. Select Drive for Fdisk
- 2-14. Typical Fdisk Partitions before Editing
- 2-15. Fdisk Partition Using Entire Disk
- 2-16. Sysinstall Boot Manager Menu
- 2-17. Exit Select Drive
- 2-18. Sysinstall Disklabel Editor
- 2-19. Sysinstall Disklabel Editor with Auto Defaults
- 2-20. Free Space for Root Partition
- 2-21. Edit Root Partition Size
- 2-22. Choose the Root Partition Type
- 2-23. Choose the Root Mount Point
- 2-24. Sysinstall Disklabel Editor
- 2-25. Choose Distributions
- 2-26. Confirm Distributions
- 2-27. Choose Installation Media
- 2-28. Selecting an Ethernet Device
- 2-29. Set Network Configuration for ed0
- 2-30. Editing inetd.conf
- 2-31. Default Anonymous FTP Configuration
- 2-32. Edit the FTP Welcome Message
- 2-33. Editing exports
- 2-34. System Console Configuration Options
- 2-35. Screen Saver Options
- 2-36. Screen Saver Timeout
- 2-37. System Console Configuration Exit
- 2-38. Select Your Region
- 2-39. Select Your Country
- 2-40. Select Your Time Zone
- 2-41. Select Mouse Protocol Type
- 2-42. Set Mouse Protocol
- 2-43. Configure Mouse Port
- 2-44. Setting the Mouse Port
- 2-45. Enable the Mouse Daemon
- 2-46. Test the Mouse Daemon
- 2-47. Select Package Category
- 2-48. Select Packages
- 2-49. Install Packages
- 2-50. Confirm Package Installation
- 2-51. Select User
- 2-52. Add User Information
- 2-53. Exit User and Group Management

- 2-54. Exit Install
- 2-55. Network Configuration Upper-level
- 2-56. Select a default MTA
- 2-57. Ntpdate Configuration
- 2-58. Network Configuration Lower-level
- 20-1. Concatenated Organization
- 20-2. Striped Organization
- 20-3. RAID-5 Organization
- 20-4. A Simple Vinum Volume
- 20-5. A Mirrored Vinum Volume
- 20-6. A Striped Vinum Volume
- 20-7. A Mirrored, Striped Vinum Volume

List of Examples

- 2-1. Using an Existing Partition Unchanged
- 2-2. Shrinking an Existing Partition
- 3-1. Sample Disk, Slice, and Partition Names
- 3-2. Conceptual Model of a Disk
- 4-1. Downloading a Package Manually and Installing It Locally
- 11-1. Creating a Swapfile on FreeBSD
- 12-1. boot0 Screenshot
- 12-2. boot2 Screenshot
- 12-3. An Insecure Console in /etc/ttys
- 13-1. Adding a user on FreeBSD
- 13-2. rmuser Interactive Account Removal
- 13-3. Interactive chpass by Superuser
- 13-4. Interactive chpass by Normal User
- 13-5. Changing Your Password
- 13-6. Changing Another User's Password as the Superuser
- 13-7. Adding a Group Using pw(8)
- 13-8. Adding Somebody to a Group Using pw(8)
- 13-9. Using id(1) to Determine Group Membership
- 14-1. Using SSH to Create a Secure Tunnel for SMTP
- 18-1. Using dump over ssh
- 18-2. Using dump over ssh with RSH set
- 18-3. A Script for Creating a Bootable Floppy
- 18-4. Using mdconfig to Mount an Existing File System Image
- 18-5. Creating a New File-Backed Disk with mdconfig
- 18-6. Configure and Mount a File-Backed Disk with mdmfs
- 18-7. Creating a New Memory-Based Disk with mdconfig
- 18-8. Creating a New Memory-Based Disk with mdmfs
- 24-1. Adding Terminal Entries to /etc/ttys
- 26-1. Configuring the sendmail Access Database
- 26-2. Mail Aliases
- 26-3. Example Virtual Domain Mail Map
- 27-1. Reloading the inetd configuration file
- 27-2. Mounting an Export with amd
- 27-3. Installing Django with Apache2, mod_python3, and PostgreSQL

27-4. Apache Configuration for Django/mod_python
29-1. LACP aggregation with a Cisco switch
29-2. Failover mode
29-3. Branch Office or Home Network
29-4. Head Office or Other LAN
A-1. Checking Out Something from -CURRENT (ls(1)):
A-2. Using SSH to check out the src/ tree:
A-3. Checking Out the Version of ls(1) in the 6-STABLE Branch:
A-4. Creating a List of Changes (as Unified Diffs) to ls(1)
A-5. Finding Out What Other Module Names Can Be Used:

From:

<http://wiki.corebsd.or.id/> - **CoreBSD Wiki**

Permanent link:

<http://wiki.corebsd.or.id/doku.php/coreprojects:freebsd-handbook-id>

Last update: **2025/10/25 17:09**

