

Table of Contents

| | |
|-----------------------|----|
| Introduction | 9 |
| What this book covers | 9 |
| About the author | 10 |
| About the Reader | 10 |
| Acknowledgements | 10 |

Category: Server console Operation13

| | | |
|----|---|----|
| 1 | Toolbox in a Toolbox | 13 |
| 2 | Server start up parameters | 15 |
| 3 | Analyzing the server startup Load Stages | 16 |
| 4 | Using the Internal Debugger | 18 |
| 5 | Preparing to store core dump files | 19 |
| 6 | Working with Java commands and applications | 22 |
| 7 | Take a shortcut: the Alias command | 25 |
| 8 | Hiding a Server Console Screen | 26 |
| 9 | Making effective use of the logger screen | 27 |
| 10 | Working with RPMs on NetWare | 29 |
| 11 | Unzip files through the server console | 30 |

Category: Installation and Configuration33

| | | |
|----|---|----|
| 12 | Copy your servers into a test environment with imaging software | 33 |
| 13 | Copy your servers into a test environment by copying the eDirectory files | 35 |
| 14 | Scheduling tasks with CRON | 38 |
| 15 | Scheduling tasks with NetWare Remote Manager | 40 |
| 16 | Pausing and Delaying an NCF file | 41 |
| 17 | Bringing some logic into your NCF files | 42 |
| 18 | Changing the bitmaps of NetWare | 44 |
| 19 | Working with the NetWare registry | 44 |
| 20 | Installing the VMware tools for your NetWare Virtual Machine | 46 |
| 21 | Which network adapter to use in a Virtual Machine | 48 |
| 22 | Using SCSI drivers in NetWare Virtual servers | 49 |
| 23 | Shrinking your NetWare Virtual Disks | 51 |

Category: File System.....55

| | | |
|----|--|----|
| 24 | Where did all that storage space go? Creating Volume Inventory reports with Remote Manager | 55 |
| 25 | Storing data and roaming profiles in users home directories without them seeing it | 57 |
| 26 | Backup and restore file system trustees | 58 |
| 27 | Some thoughts on salvage and purge | 60 |
| 28 | Accessing your server's local DOS drive | 62 |
| 29 | Using USB removable devices | 64 |
| 30 | Mounting an ISO file as a NetWare volume | 65 |
| 31 | Create CD-ROM volumes in eDirectory | 66 |
| 32 | Getting stuff to the other side: iSCSI NSS mirroring | 67 |

Category: Networking73

| | | |
|----|--|----|
| 33 | Configure all services on a secondary IP address | 73 |
| 34 | Troubleshooting tools for connectivity problems | 77 |
| 35 | DHCP Server logging | 80 |
| 36 | DNS Server logging | 81 |
| 37 | Basic load balancing with DNS round robin | 82 |

Category: Printing87

| | | |
|----|---|----|
| 38 | Auditing your printing environment | 87 |
| 39 | Advanced iPrint reporting | 89 |
| 40 | Save the environment! Print to the server console | 91 |
| 41 | Configure your printers with a Driver Profile | 91 |

Category: eDirectory95

| | | |
|----|--|-----|
| 42 | Performing a basic eDirectory Health Check | 95 |
| 43 | Removing a server from the tree: gracefully or with a sledgehammer | 99 |
| 44 | Using iMonitor in Advanced Mode | 103 |
| 45 | Searching for objects with future timestamps | 105 |
| 46 | Finding hidden objects in eDirectory. Come out with your hands up! | 108 |
| 47 | Recovering from a forgotten Admin password or a deleted Admin | 113 |
| 48 | Removing replicas from top to bottom | 116 |

| | | |
|----|--|-----|
| 49 | Give every server its own place to live in: a server container | 117 |
| 50 | eDirectory Cache configuration | 118 |
| 51 | eDirectory Index configuration | 122 |
| 52 | Using a DSmaster server | 125 |
| 53 | Keep an eye on what your LDAP server is doing | 126 |
| 54 | Modifying user home directory references via LDAP | 129 |
| 55 | UIMPORT is still out there | 132 |
| 56 | Running external commands from a login script | 134 |
| 57 | Chaining login scripts to centralize User Management | 135 |
| 58 | Reading the Windows Registry from a login script | 136 |

Category: Novell Client141

| | | |
|----|--|-----|
| 59 | The best method to deploy the Novell Client | 141 |
| 60 | Manually Installing the Novell Client: Making the Right Choices | 143 |
| 61 | Using Automatic Client Upgrade (ACU) to Update Workstations | 146 |
| 62 | Updating the Novell Client with the Update Agent | 147 |
| 63 | Managing unattended Novell Client installations with NCIMAN | 148 |
| 64 | Installing the client through a web server | 149 |
| 65 | Novell Client optimization | 151 |
| 66 | Location dependent and context-less login with location profiles | 153 |
| 67 | How to create a NetWare DOS boot diskette | 155 |

Category: Security161

| | | |
|----|---|-----|
| 68 | Checking and fixing your security domain with SDIDIAG | 161 |
| 69 | Checking and fixing your server certificates with PKIDIAG | 162 |
| 70 | Automatically accept server certificates | 163 |
| 71 | Kill the Bindery | 166 |
| 72 | Securing your Admin account | 167 |
| 73 | Securing your LDAP environment | 168 |

Category: Clustering173

| | | |
|----|---|-----|
| 74 | Use NCF files in stead of Load and Unload scripts | 173 |
| 75 | Install clustered application files on the shared disk | 174 |
| 76 | Build a fail-over matrix to prevent overloading the cluster nodes | 175 |

| | | |
|----|---|-----|
| 77 | Cluster your networking services for free | 175 |
| 78 | Setting up cluster e-mail notification | 178 |
| 79 | Adding clustering to the NSS iSCSI mirroring scenario | 180 |

Category: Remote Management.....185

| | | |
|----|--|-----|
| 80 | Easy and Secure Remote Control | 185 |
| 81 | Free Remote Console | 186 |
| 82 | Browser based remote control for console and GUI | 187 |
| 83 | Client based remote control | 189 |
| 84 | Using VNC for NetWare | 191 |

Category: Management Products.....195

| | | |
|----|---|-----|
| 85 | Easy role based administration with Plug in studio | 195 |
| 86 | Working with the master replica only in ConsoleOne and iManager | 199 |
| 87 | Changing the properties on members of a group or a template | 201 |
| 88 | Boost performance for ConsoleOne | 202 |
| 89 | Using the eDirectory ODBC Driver | 204 |
| 90 | ConsoleOne reports | 206 |
| 91 | Simplify login to Remote Manager | 210 |
| 92 | Set up an emergency account for Remote Manager | 210 |

Category: Support and other resources.....215

| | | |
|-----|---|-----|
| 93 | Support Pack installation strategy | 215 |
| 94 | Get a free insurance policy for NetWare disasters | 217 |
| 95 | Is your environment tested and approved? | 217 |
| 96 | The Novell website inside out | 218 |
| 97 | Third party NetWare resources | 219 |
| 98 | Provide feedback to Novell | 220 |
| 99 | Must have books for your NetWare environment | 221 |
| 100 | Share your ideas | 222 |

Index223

Introduction

With 90 million users worldwide, working with a NetWare environment every day on four million deployed servers, NetWare is still a very popular operating system.

Each day, hundreds of thousands of system administrators manage those servers and keep them up and running. 2005 is the year of Open Enterprise Server, and while Linux is interesting, many administrators are confident that NetWare will remain the operating system of choice for their company in the next several years.

NetWare servers run stable, secure and fast, while requiring a minimum amount of maintenance and administration. However, from time to time something can happen in the software that needs to be fixed, someone comes up with a feature request that is not available yet, or a system administrator wants to perform some preventive maintenance.

In those situations, this book will help professionals who are managing NetWare servers by providing tips and tricks that are not described in the product manual or need extra clarification. The information in this book has been collected by the author during the past ten years, while he managed hundreds of NetWare servers and delivered many NetWare administration courses.

What this book covers

The tips and tricks in this book are based on real life scenarios that NetWare administrators come across on a daily basis. Tips are divided into twelve categories, ranging from the installation, upgrade, and configuration of a NetWare server to advanced searches in iMonitor, iManager and ConsoleOne and from chaining login scripts to working with NetWare's internal debugger.

This book contains information about practical issues and uses a practical approach to solve and prevent problems that administrators can come across in their NetWare environment. The author did not intend to create a book with all the background information that exists on the NetWare Operating System. Instead, he has described how to work with the tools and how to implement the tips in a new or existing NetWare environment. When necessary, he explains the technical concepts to help the reader understand what happens while implementing a specific tip.

This book is not a complete guide for NetWare Administrators. Common daily operations like creating users and managing rights on a NetWare server are explained in the product manual and many of the NetWare Administrator's guides that are readily available.

The tips and tricks in this book work on recent versions of NetWare. Some tips may even work on NetWare 3, 4 and 5. The author has focused primarily on NetWare 6 and 6.5 for his research and has also tested many tips on the NetWare version of Open Enterprise Server.

About the author

Rob Bastiaansen is an independent consultant and trainer. Rob has a strong focus on NetWare, Clustering Services, eDirectory and ZENworks. He delivers Advanced Technical Training for Novell in EMEA regarding these topics. Rob is also a technical writer; he writes for several IT magazines in The Netherlands, where he lives. VMware is another of the areas in which Rob works as a consultant and trainer. In 2004, Rob wrote and published his first book: Rob's guide to using VMware. He is a Master Certified Novell Instructor and holds all the major Novell certifications, including Certified Linux Engineer.

About the reader

You are managing a NetWare server and know how to perform daily management tasks. You understand the most important concepts of eDirectory, such as replica types and what partitioning means, and you know how to work with the server console.

You can use some additional information on how the NetWare server works, and how you can perform management tasks easier. You want to know how to fix problems that occasionally occur in your NetWare environment and you want to know how to prevent problems from happening.

Whether you have just started working with NetWare or Open Enterprise Server, or have been a system manager for ten years; you will find information in this book that you do not already know and that you can use in your environment.

Acknowledgements

Anne en Roald: if you are old enough and able to read this book in English, I hope you can understand why it was so much fun writing this book, that I had to spend so much time in my office.

This book would not have been written if it wasn't for Raymond Meijll who made me enthusiastic about a book with tips and tricks. I thank Raymond for getting me started and for his contribution to his part of the tips. I would also like to thank Roel van Bueren for reviewing the material from a technical perspective.