Table of Contents

Introduction and System Requirements 9
VMware Server: Product Overview 10
Features in VMware Server 11
Support for 64-bit Guest Operating Systems 11
Two-Way Virtual SMP (Experimental Support) 11
Connect to GSX Virtual Machines and GSX 3 Hosts 11
Upgrade and Use GSX Virtual Machines 11
Move Existing Virtual Machines 11
Compatible with Workstation 5.x Virtual Machines 12
VMware Server C API Technology Preview 12
Configure Virtual Hardware Devices to be Automatically Detected 12
Before You Install the Release 12
Host System Requirements 14
Server Requirements 14
Remote Client Requirements 20
Virtual Machine Specifications 22
Supported Guest Operating Systems 25
Hardware Requirements for 64-bit Guest Operating Systems 25
Technical Support Resources 30
Self-Service Support 30
Online and Telephone Support 30
Support Offerings 30
Reporting Problems 30
Log Files 32

Installing VMware Server 35
Selecting Your Host System 35
About the VMware Server Console on the Server 36
Installing VMware Server on a Windows Host 38
Basic Installation 39
Default Directories 41
Installing the VMware Server Software on a Windows Host 41
Installing VMware Server on a Linux Host 49
Basic Installation 50
Default Directories 52

Beta 2

Installing the VMware Server Software on a Linux Host 53
Before You Install the VMware Management Interface on a Linux Host 56
Installing the VMware Management Interface on a Linux Host 57
Installing an X Server 58
Before You Install on a SuSE Linux Enterprise Server 8 Host 59
Configuring Web Browsers for Use with VMware Server 60
Launching the VMware Server Console from the Management Interface on an Encrypted Server 60
Connecting to the Management Interface on a Proxy Server 61
Launching Help in Netscape on a Linux System 62
Installing the VMware Server Console 63
Installing the VMware Server Console on a Windows Host 63
Installing the VMware Server Console on a Linux Host 65
Installing the VMware Scripting APIs 67
Installing the VmPerl and VmCOM Scripting APIs on a Windows Host 67
Installing the VmPerl Scripting API on a Linux Host 70
Uninstalling VMware Server 72
Uninstalling VMware Server on a Windows Host 72
Uninstalling VMware Server on a Linux Host 74

Migrating to VMware Server 77
Preparing for the Migration 78
Before You Install VMware Server 78
When You Remove Another VMware Product and Install VMware Server 80
Migrating on a Windows Host 81
Migrating on a Linux Host 82
Uninstalling GSX Server on a Linux Host 82
Using Virtual Machines Created with GSX 2 and 3 with VMware Server 83
Creating Everything New from the Start 83
Using a Legacy Virtual Machine without Upgrading the Virtual Hardware 83
Using a Legacy Virtual Machine and Upgrading the Virtual Hardware 84
Notes on Upgrading Virtual Hardware 84
Using Virtual Machines Created Under Workstation 5.x 93

Managing Virtual Machines and the VMware Server Host 95
Remotely Managing Virtual Machines 96
Changing the Port Number for VMware Server Console Connections 97
Downloading the VMware Server Console 99

beta

Securing Virtual Machines and the Host ____ 102
Understanding Permissions and Virtual Machines ____ 102
Authenticating Users and Running Virtual Machines on a VMware Server for Windows Host ____ 105
Authenticating Users and Running Virtual Machines on a VMware Server for Linux Host ____ 107
Checking Permissions in the VMware Management Interface ____ 109
Securing Your Remote Sessions ____ 109
Identifying a Virtual Machine by Its UUID ____ 111
Specifying a UUID for a Virtual Machine ____ 112
Logging VMware Server Events on Windows ____ 113
Backing Up Virtual Machines and the VMware Server Host ____ 115
Using a Backup Agent in the Virtual Machine ____ 115
Using a Backup Agent Running on the Host Operating System ____ 115
Backing Up the VMware Server Host ____ 116
Considerations for Backing Up Virtual Machines ____ 116
Using the VMware Management Interface ____ 117
Setting the Session Length for the VMware Management Interface ____ 118
Logging On to the VMware Management Interface ____ 119
Using the Status Monitor ____ 120
Configuring a Virtual Machine ____ 124
The Apache Server and the VMware Management Interface ____ 130
Logging Off of the VMware Management Interface ____ 130
Deleting Virtual Machines ____ 131
Deleting a Virtual Machine Using the VMware Server Console ____ 131
Configuring the VMware Server Host ____ 132
Securing Remote Connections with SSL ____ 132
Configuring Startup and Shutdown Options for Virtual Machines ____ 133
Setting User Preferences for the VMware Server Host ____ 137
Setting Global Preferences for VMware Server ____ 143
Setting a MIME Type to Launch the VMware Server Console ____ 146

Moving and Sharing Virtual Machines ____ 149
Moving a VMware Server Virtual Machine ____ 151
Virtual Machines Use Relative Paths ____ 151
Preparing Your Virtual Machine for the Move ____ 151
Moving a Virtual Machine to a New Host ____ 152

Beta

Moving a GSX Server 3 Virtual Machine 154
Virtual Machines Use Relative Paths 154
Preparing Your Virtual Machine for the Move 154
Moving a Virtual Machine to a New Host 155
Moving Older Virtual Machines 157
Virtual Machines May Use Relative or Absolute Paths 157
Preparing Your Virtual Machine for the Move 158
Preparing the New Host Machine 158
Considerations for Moving Disks in Undoable Mode 159
Sharing Virtual Machines with Other Users 162

Performance Tuning and the VMware Server Host 163
Configuring and Maintaining the Host Computer 164
Location of the Working Directory 164
Defragmentation of Disk Drives 164
Adequate Free Disk Space 165
NIC Interrupts Coalescing 165
Configuring VMware Server 166
General VMware Server Options 166
VMware Server on a Windows Host 170
VMware Server on a Linux Host 172
Understanding Memory Usage 174
Memory Use on the Host 174
Specifying How Much RAM is Used by All Running Virtual Machines 175
Memory Usage on Older Linux Hosts 177

High-Availability Configurations with VMware Server 179
Using SCSI Reservation to Share SCSI Disks with Virtual Machines 180
SCSI Reservation Support 180
Enabling SCSI Reservation 181
Issues to Consider When Sharing Disks 182
Overview of Clustering with VMware Server 184
Applications That Can Use Clustering 185
Clustering Software 185
Creating a Cluster in a Box 186
Configuring Virtual Machines for Cluster in a Box 187
Creating a Two-Node Cluster with Microsoft Clustering Services on a Single VMware Server Computer 188

pdfy

Using Network Load Balancing with VMware Server ____ 195
Overview of Network Load Balancing Clusters ____ 195
Creating a Multinode Network Load Balancing Cluster ____ 196
Creating Two-Node Clusters Using Novell Clustering Services ____ 200
Creating the First Node's Base Virtual Machine ____ 200
Creating the Second Node in the Cluster ____ 201
Installing the Guest Operating System and VMware Tools ____ 201
Adding the Shared Disks to Both Virtual Machines ____ 201
Installing Novell Clustering Services on the Cluster Nodes ____ 203
Clustering Using the iSCSI Protocol ____ 204
Clustering Scenarios Using iSCSI ____ 204
Creating and Configuring the iSCSI Initiator Virtual Machine ____ 205
Configuring the iSCSI Target in the Cluster ____ 206

Glossary ____ 207

Appendix—Mounting Virtual Disks Outside of Virtual Machines ____ 213
Considerations for Mounting Virtual Disks ____ 213
Statement of Support ____ 214
Installing the VMware Server ____ 215
Running the VMware DiskMount Utility ____ 216
Examples Using the VMware DiskMount Utility ____ 217

Index ____ 219

beta 2