X11R5 MIT-SHM extension 395
Xdm - Broadcast access method 100, 533
Xdm - Direct access method 101, 534
Xdm - Indirect access method 101, 534
Xdm Access Control 535
Xdm Access Type field 100, 533
Xdm Direct 101, 534
Xdm KeepAlive retry timeout field 102, 535
Xdm Magic Cookie 535
Xdm Minimum KeepAlive time 535
Xdm Minimum KeepAlive time field 102, 535
Xdm Retry Action 535
Xdm Retry Action field 102, 535
XDMCP (X Display Manager Control Protocol) 100, 533
XDMCP Options 100, 533
XDMCP Options Menu 15, 100, 533
XDMCP Server Address field 101, 534
Xev (X Event) 154
Xev Key Monitoring 154
xgif 113
xlsfonts 171
xmkmf Utility Program 62
xmodmap 108, 152
xmodmap -pk 152
xmodmap -pm 152
xmodmap -pp 152
Xpmroot 382
xrsh Utility Program 62
xscope Diagnostic Utility 62
xset fp 171

Starting with BOOTP 125
Starting Xdm on the RS6000 586
Startup Command File 44
Startup Command file 117
Startup Command File field 116
Startup Options Menu 16
Startup Options Selection 114
Sun and SCO diskettes 57
Sun Keyboard Connector 13
Sun Network Services 559
Sun NIS IP Addressing 130
Sun Open Windows Applications 559
SUN tape handling 56
Sun Type 4 keyboard 3
Sun Type 5 keyboard 3
Syslog Configuration File field 116
syslog.conf 51, 54, 581

T

Tandem 6530 79
Telnet Terminal Window 93
TFTP 559, 568
TFTP - Tririal File Transfer Protocol 568
TFTP File Transfer Protocol on RS6000 521, 585
TFTP in “Secure Mode” on HP Systems 520, 569
TFTP on HP/UX systems 520, 569
TFTP service on HP Systems 519, 568
The flash boot Command 179
The flash files Command 179
The flash server Command 179
ThickWire Connection 68
ThickWire Ethernet 67
ThickWire Ethernet - DB15 Connector 12
ThinWire Connection 67
ThinWire Ethernet 67
ThinWire Ethernet - BNC Connector 12
Token Ring Communications Menu 65, 99
Token Ring Connections 63
Token Ring Interface 71
Token Ring PCMCIA card 63
Twisted-pair Connection 67
Twisted-pair Ethernet 67
Twisted-Pair Ethernet - RJ45 Connector 11
Twisted-pair Ethernet Auto-sense 69

U

Undo button 92
Use backing store field 111
Use save unders field 111
Usepty Script 42
usepty Utility Program 62
User Preferences Menu 15
User Preferences Selection 106
Using Alternate Font Servers 165
Using the fdisk Command 178
Using the flash Command 179
Using the Hard Disk Drive 178

V

Verifying the Fontpath Setting 171
Video Connector - DB15 high-density 11
ViewStation .snf Font Files 165
ViewStation assigned IP address 90
ViewStation Audio Operation 385
ViewStation Audio Specifications 391
ViewStation Audio with Application Programs 390
ViewStation Circuit Board specifications 1
ViewStation Console Shell Window 27
ViewStation Controls and Indicators 8
ViewStation Environmental Requirements 8
ViewStation Error Message Reporting 35
ViewStation External Connections 2
ViewStation firmware version 90
ViewStation Flash File System 43
ViewStation FlashPROM 176
ViewStation Font File Formats 165
ViewStation Hard Disk Drive Storage Devices 177
ViewStation installed memory 90
ViewStation Internal Architecture 27
ViewStation Internal File System Structure 38
ViewStation Keyboards 149
ViewStation Light pen 4
ViewStation Memory specifications 1
ViewStation monitor resolution 90
ViewStation Mount Points 38
ViewStation Multimedia Operation 385
ViewStation Network Services 16
ViewStation Part Number 19
ViewStation PC Card Adapter Card 175
ViewStation Physical Characteristics 7
ViewStation Pointer Mappings 153
ViewStation Print Spooler Example 552
ViewStation Remote Access Reporting 189
ViewStation rhosts Security 189
ViewStation ROM cards 177
ViewStation Serial Connection 74
ViewStation Serial Number 19
ViewStation Server-Resident Fonts 17
ViewStation Specifications 1
ViewStation Startup Considerations 128
ViewStation Startup Files 43
ViewStation Video Memory specifications 2
ViewStation Video Operations 392
ViewStations with 4 MB Memory 123
VMS Setup Mode Entries 576
Vnn.hds Server Code 94
Vnn-D.hds Server Code 94

W

WordPerfect fonts 51, 53, 579

X

X logo screen saver 110

PPP protocol 74
PPP Protocol Field Compression 78
PPP Protocol for Serial Communications 77
PPP Van Jacobson Header Compression 78
Primary Resolver field 106
Printing from the Console Window 37
Problems with BOOTP Starting 126
Putting the Font Server in the Font Path 164

Q

Quick Starting with Setup Mode 87

R

RARP 69, 115
RARP (Reverse Address Resolution Protocol) 115, 563
RARP Protocol Example 130
Reboot button 92
Remote Access to ViewStation Ports 41
Remote Configuration of the ViewStation 89
Remote Configuration of ViewStation 133
Remote Configuration Security Considerations 148
Remote Hosts Menu 15, 102
Remote Management of ViewStations 148
Remote Mount Directories 38
Remote Mount Directory 39, 105
Remote Setup Mode Operation 86
Reset NVM to Factory Defaults 16
Reset NVM to Factory Defaults Selection 117
Reset Server Command file 117
Reset server when last client exits field 113
Reset X Server field 117
Restart and Reset Menu field 116
Restart and Reset Menu Selection 116
Restart and Shutdown Menu 16
Restart button 92
Restart ViewStation from current RAM image field 117
Restart ViewStation from ROM/Network field 117
Restore Settings from NVM 16, 118
RGB Definition File field 107
rgb.txt colormap file 107
rlogin 29
Route Command 84
Route table for ViewStation 84
Routing table 71
RS6000 585
rsh 29
RSH Permissions on the RS6000 586
Run Local Chooser field 101, 534

S

Sample bootptab File 127
Sample Printer Model File 553
Save button 91
Save Unders 112
Screen saver interval field 110
Screen saver method field 110
Screen Saver Settings 110
Screen saver timeout field 110
Screen Settings field 113
script 37
Secondary Resolver field 106
Selecting the Ethernet Physical Typ 68
Selecting the Monitor Type 5
Send SNMP traps field 116
Serial Connection Example 80
Serial Connections 63
Serial Port - DB-25 Connector 13
Serial Port - RJ11 Connector 9
Serial Port 1 74
Serial Port 1 (RJ11) 74
Serial Port 2 74
Serial Port 2 (DB25) 74
Serial Port Menu 74
Serial Port Physical Connection 74
Serial Terminal Window 79, 93
Server Reset Command File field 116
Server-reset Command File 44
Setting the Fontpath 170
Setup Mode 85
Setup Mode Editing 88
Setup Mode Editing Keys 150
Setup Mode Function Buttons 91
Setup Mode Heading Bar 90
Setup Mode Hidden Icon Hotkey 150
Setup Mode hotkey 85
Setup Mode IP Address Selection 129
Setup Mode Keystrokes 150
Setup Mode Main Menu 90
Setup Mode Operation 86
Setup Mode Password Protection 89
Setup Mode Selection Buttons 90
Setup Mode with Hidden Icon 85
Setup Options Selection 97
Shared Memory Extension 212
Shift-Pause key 80
Short Break 79, 80
SLIP 64, 77
SLIP protocol 74
snftobdf Font Conversion Program 62
SNMP (Simple Network Management Protocol) 116
SNMP Trap host field 116
SoftPC fonts 51, 53, 580
SQE 67, 68
Start CSLIP 79
Start PPP 79
Start SLIP 79
Starting from a ViewStation Hard Disk 119
Starting from Local Storage 119
Starting from Monitor Mode 120
Starting the ViewStation 119
Starting ViewStation Clients 93

Keymap Changes with Xmodmap 155
Keystroke Functions on the ViewStation 150
Keysym Changes 156

L

Lexmark 122 key IBM 3270 keyboard 3
Link Integrity 67, 68
Loading Fonts to the ViewStation 170
Loading New Server Code into flashPROM 176
Loading the HDSware Tape Manually 56
Loading the ViewStation’s Configuration File 134
Loading the ViewStation’s Server File 133
Local Floppy Filesystem Access 197
Local Mount Directories 38
Local Mount Directory 39
Local Mount Directory field 105
Local storage Benefits 128
Logical Connection to the Ethernet 69
Long Break 80
Lotus 123 fonts 51, 53, 580
Low Memory Warning Client 97
LP Print Service 547
LP Print Service for UNIX System V Printing 553
LPD print spooler 50, 54, 580
LPD Print Spooler for BSD Systems 547

M

Making a fonts.alias File 173
Making a fonts.dir File 172
Making Special .snf Font Files 165
Medium Access Unit 67
Memory fragmentation 96
Microsoft AVI format 401
MIT bdftosnf 167
mkfontdir 59
Modifier and Lock Key Changes 156
Modifier Keymappings 153
Monitor Mode 47, 119
Monitor Mode Benefits 129
Monitor Mode Commands 121
Monitor Mode Key Mappings 120
Monitor Mode Keystrokes 151
Monitor Mode Sample Entries 122
Monitor Mode Screen 120
Motif Bindings for HDSterm Keys 162
Motif Window Manager 93, 97
Mount Directory Example 40
Mouse and Pointing Devices 3
Mouse Button Changes 155
Mouse Connector 8
MS-DOS diskettes 57
Multimedia Audio Specifications 183
Multimedia Devices 183
Multinational Keyboards and Mappings 157

N

NetAudio 184
netTV Simulcast 410
netTV Viewer 413
Network Address field 104
Network Connections 63
Network Printing Operations 547
Network timeout value field 65, 99
Network Trailers 71
Network-based ViewStation Operation 131
NFS 559, 568
NFS - Network File System 571
NFS on HP Systems 571
NFS on VMS Systems 577
Non-Volatile Memory 122
Notes on Backing Store and Save Under Features 112

O

Opeartion with the flashPROM Board 43
OPEN LOOK fonts 51, 53, 579
OPEN LOOK Virtual Window Manager 97, 564
OPEN LOOK Window Manager 93, 563
Open Windows Applications 563
opendev 31
opendev Command 41
Operation with PCMCIA Devices 43

P

Parallel Port - DB25 Connector 10
passwdRequired 31
PC Card 175
PC Card Board 3
PC Card Devices 3, 175
PC Card interface 3
PCMCIA (Personal Computer Memory Card Interface Association) 175
PCMCIA device 43
PCMCIA interface 3
PCMCIA Port 13
PEX-3D Extension 212
Ping Command 84
Ping command - ViewStation 84
Power Supply 3
PPP 64
PPP Connection Example 81
PPP daemon on the host 81
PPP Diagnostic Message Level 78
PPP IP Address Negotiation 78
PPP Link Quality Monitoring 78
PPP Link Quality Test Interval 78
PPP Local Authorization Name 79
PPP Local Authorization Password 79
PPP Maximum Receive Unit 79
PPP PAP Authentication Allowed 79
PPP Protocol 77

Get server code from field 115
getbdf 52, 54, 166, 580
getbdf Font Conversion Utility 61
getbdf Font Utility 168

H

Handling .bdf Fonts and Fonts in other Formats 168
Hangup 79
Hard Disk Configuration File 146
HDS Audio 387
HDS Audio File Playback program 390
HDS Audio Manual Page 419
HDS Camera 109, 386
HDS Conference 395, 403
HDS external speaker 110, 387
HDS Font Utility Programs 166
HDS headset 109, 386
HDS internal speaker 110, 387
HDS microphone 109, 386
HDS Movie 395, 401
HDS NetAudio compatible server 389
HDS netTV Simulcast 395
HDS netTV Viewer 395
HDS netVideo Clients 395
HDS netVideo Hardware 392
HDS netVideo Playback Specifications 393
HDS netVideo Specifications 393
HDS screensaver screen lock 111
HDS Tuner 395, 408
HDS tuner 109, 386
HDS Video 396
HDS Video Hardware Configuration 392
HDS ViewCam Camera 396
hdsaudio 184
hdscrypt 52, 54, 580
hdscrypt Encryption Utility Program 61
hdsfc960 52, 53, 166, 580
hdsfc960 Font Conversion Utility 59
hdsfc960 Font Utility 168
HDSinstall 49, 50, 53
hdsmkdir 52, 54, 59, 166, 580
hdsmkdir Font Utility 168
hdsmkdir Font Utility Program 59
HDS-Model File 555
HDSperx 47, 579
HDSperx clients 94
HDSperx Screensaver client 111
hdsplay 390
HDSrunwm Launcher Program 284, 306
hdsshare 381
HDSshare Manual Page 381
HDSterm 79, 93
HDSterm Environment Variable Keystrokes 151
HDSterm Event Translations 159
HDSterm Keymap Groups 159
HDSvidinstall 394
HDSware 47
HDSware Abbreviation 134
HDSware Contributed Programs 61
HDSware Directory Location 87
HDSware distribution formats 47
HDSware host 38
HDSware Host Address 87
HDSware Installation Script 577
HDSware netVideo Software 394
HDSware on an Internal Hard Disk Drive 48
HDSware path 38
HDSware Tape Contents 53
HDSware Utility Programs 58
Help button 92
Host Name field 104
Host resolver file address field 106
Host resolver file field 106
Host Type field 104
http://www.hds.com xxiii
hwconfig command 70

I

IBM 101+ style keyboard 3
IBM 102 key multinational keyboard 3
IBM 3270 79
IBM RS6000 Fonts 586
IEEE 802.3 10BaseT 67
IEEE 802.3 Auto-sense 71
IEEE 802.3 Ethernet 71
Implementing "opendev" in a C Program 42
Include Statements in a Configuration File 144
Installing HDSware netVideo Software 394
Intel INDEO compression 401
Internet Server xxiii
IP (Internet Protocol) address 69
IP Addressing with BOOTP 129
IP Addressing with RARP 129
IP Broadcast Address field 65, 99
IP Internet Protocol address 70
IP Network Addressing 70

K

Key Handling 154
Key Handling in a Client/Server Environment 154
Key Mappings 152
Keyboard and Bell Settings 108
Keyboard Connections 150
Keyboard Connector 9
Keyboard Cursor Mode 150
Keyboard Operations 151
Keyboard Type field 108
Keyboards 3
Keyboards and their Operations 149
Keyclick volume field 108
Keycode Modification Tables 152
KeycodeTranslation file 152
Keymap Changes with Event Translations 157

Communications Options Menu 15
Compiling HDSware Utility Programs 58
Compressed Font Files 165
config.fx 50, 54, 581
Configuration File clients.config.dsk 147
Configuration File config.fx.dsk 146
Configuration File field 115
Configuration File for 4 MB ViewStations 148
Configuration File Syntax 134
Configuration Password 89
Configuration password field 114
Configure Serial Port 1 field 64, 99
Configure Serial Port 2 field 64, 99
Configuring the ViewStation for Multimedia 183
Console Window 27, 93, 95
Console Window as a Local Display 29
Console Window Commands 31
Console Window from a Remote Host 29
Console Window Messages 35
Console Window Privileged commands 34
Console Window Security 30
CSLIP 64, 77
CSLIP , "Van Jacobsen compression", RFC 1144 75
CSLIP communications 75
CSLIP protocol 74
Customizing HDSterm Keys 160

D

DEC LK401 (VT420 type) keyboard 3
DEC TK50 cartridge tape 56
Default Font Path field 107
Default Suffix field 106
Default Telnet host field 103
Determine IP address field 115
Determining the IP Address 129
Determining the ViewStation's IP Address 133
Diagnostic Messages from a Remote Terminal 30
Direct Serial Connections 79
Disk drive 119
Display memory warnings at field 113
Display Monitors 4
Domain Name Server 39
Domain Name Servers Menu 15
Domain Name Servers Selection 105
Downloading the RGB Color Definition File 107

E

Entering Setup Mode 85
Environment Variable Keystrokes 151
Ethernet address 19, 70
Ethernet and IEEE 802.3 Differences 71
Ethernet Communications 64, 99
Ethernet Connections 63, 65
Ethernet hardware address 19
Ethernet IP address 66
Ethernet netmask field 66
Ethernet Type field 67
Event Translation table 156
Exit button 92

F

fdformat utility 198
File Names and Paths in Setup Mode 88
flash boot command 56
flash files command 56
flash server command 56
flashfilesys 52, 54, 580
flashfilesys command 56
flashfilesys Utility Program 61
flashPROM 119
FlashPROM Board 2
Floppy Disk Drive 3, 195
Floppy Disk Drive Access 196
Floppy Drive File Ownership 198
Floppy Drive Formatting disks 198
Floppy Drive NFS Access 197
Floppy Drive RCP (Remote Copy) Access 197
Floppy Drive with a Printer 196
Font caching memory 96
Font File Formats - .bdf and .snf 166
Font Handling 163
Font Server Operations 164
Fonts in the X Window System 163
FTP 559, 568
FTP - File Transfer Protocol 570
FVWM - GoodStuff Module 497
FVWM auto-raise module 492
FVWM background changer module 493
FVWM button panel module 497
FVWM debugger module 496
FVWM desktop clutter reduction module 495
FVWM iconbox module 500
FVWM identify-window module 505
FVWM Pager module 506
FVWM scroll-bar module 509
FVWM Virtual Desktop 461
FVWM Virtual Window Manager 459
FVWM window list module 510
FvwmAudio 490
FvwmAuto 492
FvwmBacker 493
FvwmBanner 494
FvwmClean 495
FvwmDebug 496
FvwmIconBox 500
FvwmIdent 505
FvwmPager 506
FvwmScroll 509
FvwmWinList 510
FX Server Code File field 115
FXUtilities Abbreviation 38, 88, 134

G

Generating an Individual Configuration File 143

I Index

Symbols
.bdf fonts 58
.snf fonts 58

Numerics
4 MB Memory ViewStations 123
4 MB ViewStation 123
4 MB ViewStations 148
4mm and 8mm DAT tape 57

A
Access Control security 535
Access Parameters field 105
Access Protocol field 104
Access to the Console Window 28
Access to ViewStation Ports 41
Adding a PCMCIA Hard Disk Drive 177
Anonymous FTP 521, 561, 570
Anonymous FTP File Transfer 521, 561, 570
Applix Aster*x fonts 51, 53, 579
Apply button 91
ARP protocol 115
ARP, Address Resolution Protocol 70
Audio Clients 387
Audio Device Setting Menu 109, 386
Audio In Device 109, 386
Audio module - FVWM 490
Audio Operation Hardware 385
Audio Out Device 110, 387
Audio Ports - Input/Output Connections 13
auhds 389
Automatic Fontpath Configuration 164
Automatic ViewStation Configuration 55
Auto-Starting an Application in HDSterm 221
Available Memory 93
Available Memory client 96

B
Backing Store 112
Backing Store/Save Unders submenu 111
bdfto960 52, 54, 166, 580
bdfto960 Font Utility 167
bdfto960 Font Utility Program 58
bdftosnf 58
Bell duration field 109
Bell pitch field 109
Bell volume field 109
Blanking screen saver 110
Booting the ViewStation from a VMS Host 123, 124, 578
Booting ViewStations with 4 MB Memory 123
BOOTP 19, 69, 115, 119
bootp 62
BOOTP (Boot Protocol Daemon) 563
BOOTP Benefits 128
BOOTP Command Fields 125
BOOTP request on Token Ring interface 523
bootptab 125, 523

C
CallPort integrated Speaker/ Microphone 109, 386
Changing Server Code Versions 148
Changing the event translation 155
Changing the ViewStation Password 148
Changing ViewStation Settings 148
Changing xmodmap 155
Client Configuration Path field 116
clients.config 50, 54, 581
Communications Board option 2
Communications Menu 64