

Index

- A
 - access control lists 296
 - active switches 311
 - application redirection function 299
 - architecture 3
 - architecture, network security 330
 - asynchronous transfer mode (ATM) 98
 - Auto-negotiation 153
 - Auto-negotiation Advertisement Register 155
 - Auto-negotiation Expansion register 157
- B
 - Basic Mode Control Register 153
 - Basic Mode Status Register 154
 - BlackDiamond switches 323
 - border gateway protocol v4 (BGP4) 311
 - bridges 66
 - business logic 312
- C
 - checksumming 146
 - cipher suite 110
 - class C network 308
 - client requests 312
 - configuring the
 - Extreme Networks switches 323
 - Foundry Networks switches 324
 - congestion control 107
 - congestion window 51, 54
 - consistent mode 142
 - Constant Bit Rate (CBR) 98
 - content switching 300
 - Control Plane 67
- CPU load balancing 148
- D
 - data flow through service modules 312
 - Data Plane 67
 - descriptor ring 141
 - design 3
 - disable source routing 127
 - Dual-attached concentrator 134
 - Dual-attached station 132
- E
 - Enterprise 98
 - Enterprise Java Beans (EJBs) 314
 - Extreme Networks equipment 317
 - Extreme Networks switches, configuring 323
- F
 - FDDI concentrators 134
 - FDDI interfaces 136
 - FDDI station 132
 - Fiber Distributed Data Interface network 131
 - firewall architecture 332
 - firewalls between service modules (figure) 331
 - flat architecture 261
 - flow control keywords 213
 - Forced mode 153
- Foundry Networks equipment 317
- Foundry Networks switches, configuring 324
- Full NAT 91, 302
- functional tiers 17
- G
 - Gigabit Media Independent Interface 157
 - global synchronization 107

H
Half NAT 91, 302
Handshake Layer 110
I
interface specifications 314
interrupt blanking 148
IP address space (private) 296
IP forwarding module 107
IP header 314
J
J2EE application 314
Java data access objects 314
Java DataBase Connectivity (JDBC) 314
Java Server Pages (JSP) 312
Jumbo frames 152
jumbo frames 217
JumpStart, Solaris 296
L
Layer 3 routing 331
Link-partner Auto-negotiation Advertisement 155
load balancing, built-in 317
local area networks, virtual (VLANs) 296
logical network architecture 296
logical network architecture overview (figure) 297
logical network design 296
M
MAC overflow 146
management network 296
mapping process 21
media access unit 128
multi-data transmission 143
multi-level architecture 261
N
netmask values 320
Netscreen Firewall configuration file 333
network
 configuration (Extreme Networks equipment)
 318
 configuration (Foundry Networks equipment)
 319
 physical 315
 security architecture 330
Network Address Translation 302
Network Address Translation (NAT) 91
network architecture with virtual routers 310
network design 3
 traditional 308
 using chassis-based switches 309
Network Service Provider (NSP) 98
O
open shortest path first (OSPF) 311
P
Parallel Detection Fault 157
partial checksumming 147
pause frames 161
physical network 315
policing 107
Precedence Priority Model 102
private IP address space 296
proxy switching 300
Q
QoS Profile 103
Quality of Service (QoS) 92
queuing 107
R
random early detection register 216
Random Early Discard 151
receive interrupt blanking values 215
receive window 54
received packet delivery method 150
Reservation Model 102
ring of trees 135
ring speed 129
round-robin 74
router 66
routers 320
routing information protocol (RIP) 311
S
secure socket layer 314
sequence of events (data flow) 314
server load balancing 298
Service Level Agreements (SLAs) 98
Services on Demand architecture 18
shaping 107
Single-attached concentrator 134
Single-attached station 132
sliding windows 54
Startup Phase 51
stateful 25
Stateful Layer 7 switching 300

Stateful Session Based 298
stateless and idempotent 25
Stateless Session Based 298
static routes 296, 311
Steady State Phase 51
streaming mode 142
Streams Service Queue model 151
switch 66
switch configuration 322
switch configuration file (Extreme switch) 323
switch configuration file (Foundry switch) 326
symmetric flow control 162
T
tagged VLAN 309
Tail Drop 107
token ring interfaces 125
token ring network 123
transmission latency 142
Transmit Pause capability 162
Trunking Policies 232
trust zones 331
U
URL switching 300
V
Variable Bit Rate-Real Time (VBR-rt) 98
virtual firewalls 331
virtual local area networks (VLANs) 296
virtual routers 310
VLAN, tagged 309
W
Web-based applications 17
weighted round-robin 74

