

Index

Symbols

###IMAGESRC### 434

###URL### 433

\$USER1\$ 73

\$USERx\$ macros 79

24x7 64, 68, 74, 270

2d_coords 365

3D display, monitored computer *see* statuswrl.cgi

3d_coords 365

A

accept_passive_service_checks 605

accept_passive_host_checks 586

accept_passive_service_checks 586

access control *see* authentication

accounts, creating 209

acknowledgement 332, 343

via cellphone 350

as a display criterion for status.cgi 337

display in NagVis 389

displaying in the Web interface 345

in Nagios 3.0 687

reading out via macro 635

setting for EventDB 540

shown in NagVis 400

via WAP 350

action_url 364, 366, 452, 692

action_url_target 608, 692

active host checks *see* host check, active

additional information, adding to Nagios Web page 61

additional_freshness_latency 586, 692

address 63, 277, 627

access via macro 627

admin_email 586

admin_pager 586

age monitoring

of a file *see* check_file_age

of a Windows file 479–480

agent (SNMP) 228

aggregate_status_updates 587, 693

aggressive_host_checks 665

alias 63, 65, 70, 72, 277

reading out via macro 627, 629

Alias (Apache) 48

alternating states *see* flapping

Amavis, monitoring 113

AND link, for check_multi 200

Apache

configuration 47–48

file 39

for NagVis 396

homepage 51

setting the environment variable 78

single sign-on with mod_auth_kerb 643–644

single sign-on with mod_auth_ntlm_winbind 645–649

Apache 1.3, and Nagios 47

Apache 2.0, and Nagios 47

Apache 2.2, and Nagios 47

APAN 456

APC UPS, monitoring 149, 150, 182–183

apcupsd 149, 182–183

apxs2 646

\$ARG1\$ 73

\$ARG2\$ 73

arguments, for check commands 73

ARGx macros 626

\$ARG1\$ 625

arrow color (NagiosGrapher) 435

AS/400, querying system load 263

ash programming 622

- asynchronous events, processing 292
 - authentication
 - configuring the NET-SNMP snmpd 240–242
 - in NagiosGrapher 436
 - in SNMP 233–234, 240–242
 - switching on/off at the Web interface 78
 - author, of plugins 559
 - authorized_for_all_host_commands 607
 - authorized_for_all_hosts 79, 607
 - authorized_for_all_service_commands 607
 - authorized_for_all_services 79, 607
 - authorized_for_configuration_information 351, 607
 - authorized_for_system_commands 607
 - authorized_for_system_information 607
 - auto_reschedule_checks 587
 - auto_rescheduling_interval 587
 - auto_rescheduling_window 587
 - autoupdatefreq (NagVis parameters) 394
 - avail.cgi 329, 351–353, 360
 - availability report *see* avail.cgi
 - availability states 96
- B**
- backend (NagVis parameters) 394, 395, 398
 - backendtype (NagVis parameters) 395
 - background color
 - of NagiosGrapher diagrams 435
 - of NagiosGrapher interface 435
 - background image, for NagVis 389, 397
 - backup, monitoring 292
 - base (NagVis parameters) 395
 - batch processing *see* bulk processing
 - BB *see* Big Brother
 - BEGIN (Perl), and the ePN 671
 - Big Brother 29
 - booting *see* system start, *see* system start
 - broadcast notifications 688
 - broker_module (nagios.cfg parameters) 377, 386
 - broker_module (nagios.cfg-Parameter) 587
 - browser refresh, configuring 78
 - buffer (NagiosGrapher) 432
 - buffer size
 - adjusting for check_by_ssh 194
 - adjusting for NRPE 194
 - for check_multi 194
 - buffer_file (file) 384
 - bulk mode (PNP) 452, 454, 663
 - bulk processing
 - external commands 687
 - of performance data 452–454
 - business process monitoring
 - with addon 203
 - with check_multi 199–203
- C**
- cached_host_check_horizon 588, 665, 689
 - cached_service_check_horizon 588, 665, 689
 - caching
 - of check results *see* check caching
 - of checks *see* check caching
 - of the Nagios self-test *see* precaching
 - Cacti 29, 457
 - allback functions 376
 - can_submit_commands 71, 682
 - CCMS 519–530
 - plugins 525–530
 - CD-ROM *see* CheckDriveSize
 - CDEF 441
 - cell phone
 - as a display device for Nagios 350
 - number for SMS *see* pager
 - certificate
 - testing the lifespan 123
 - testing the time span 134
 - Web server testing 101
 - cfg_file 588
 - cfg_dir 55, 321, 430, 437, 588, 692
 - cfg_file 55, 692
 - CGI configuration 77–79
 - CGI programs
 - avail.cgi *see* avail.cgi
 - calling your own 126 *see* action_url
 - cmd.cgi *see* cmd.cgi
 - config.cgi *see* config.cgi
 - extinfo.cgi *see* extinfo.cgi
 - histogram.cgi *see* histogram.cgi
 - history.cgi *see* history.cgi
 - interaction with Nagios 327
 - notifications.cgi *see* notifications.cgi
 - outages.cgi *see* outages.cgi
 - showlog.cgi *see* showlog.cgi
 - status.cgi *see* status.cgi
 - statusmap.cgi *see* statusmap.cgi
 - statuswml.cgi *see* statuswml.cgi
 - statuswrl.cgi *see* statuswrl.cgi
 - summary.cgi *see* summary.cgi
 - tac.cgi *see* tac.cgi
 - trends.cgi *see* trends.cgi

- working with Nagios 104
- CGI scripts *see* CGI programs
- cgi.cfg 54, 55, 77–79, 329, 347, 351, 606–610
 - effects of single sign-on 645
- cgi_config (NagiosGrapher) 433
- change of state, continual *see* flapping
- check latency *see* latency time
- check_disk 220
- check_http, testing the lifespan of a certificate 123
- check_icmp, evaluating performance data with NagiosGrapher 437
- check_service_freshness 590
- check_snmp_cpfw 260
- check_tcp
 - for monitoring POP3 and IMAP 113
 - warning limit 133
- check_ups 150
- check_users 177
- CheckAlwaysCRITICAL (NSClient+ function) 495, 504
- CheckAlwaysOK (NSClient+ function) 495, 504
- CheckAlwaysWARNING (NSClient+ function) 495, 504
- check_apc 182–183
- check_by_ssh 102, 131, 205–208
 - adjusting buffer size 194
- check_caching 689
- check_cluster 189–191
 - installation 45
- check_command 63, 67
- checkcommands.cfg 111, 112, 276
- CheckCounter (NSClient+ function) 495, 501
- CheckCPU (NSClient+ function) 495, 498
- check_dhcp 146–149
- check_dig 129–130
- check_disk 158–221
 - evaluating performance data graphically 414
 - evaluating performance data with NagiosGrapher 440–443
- CheckDisk.dll 467
- check_dns 128–129
- CheckDriveSize (NSClient+ function) 495–497
- check_du.pl 563–573
- check_dummy 188, 294, 310
 - for Windows 491
- check_eventdb.pl 542–543
- CheckEventLog (NSClient+ function) 495, 502, 532
- check_external_commands 293, 588
- check_file_age 181
- CheckFileSize (NSClient+ function) 495, 496
- check_for_orphaned_hosts 589, 689
- check_for_orphaned_services 589
- check_freshness 296, 661
 - and notification_failure_criteria 287
- check_ftp 119
- check-iftraffic 257–259
- CheckHelpers.dll 467
- check_host 111, 665
- check-host-alive 63
- check_host_freshness 589
- check_http 101, 119, 125
 - critical limit value 120
 - reaction to a Web server redirect 121
 - regular expressions in queries 121
 - specifying user and password for the test 121
 - testing SSL connection 123
 - warning limit 120
 - for Windows 491
- check_icmp 83, 109, 112, 455
 - vs. check_ping 109
 - critical limit 109
 - evaluating performance data with Nagiosgraph 412
 - evaluating performance data with NagiosGrapher 440
 - as a host check 111–112
 - host entry 109
 - options 109, 110
 - performance data 198
 - from a performance perspective 665
 - as a service check 111
 - test 46–47, 110
 - use with negate 188
 - warning limit 109
 - and Windows 492
- check_ifoperstatus 103, 254–255
- check_ifstatus 103, 252–253
- check_imap 115
- check_interval 68, 96, 678, 680
- check_latency 660–662
- check_ldap 143–146
- check_load 162–163
- check_log 167–176
- check_log2 169
- check_logfiles 170–176
- check_mailq 180
- CheckMem (NSClient+ function) 495, 500
- check_mrtg 660

- check_multi 191–203
- CheckMultiple (NSClient+ function) 495, 504
- check_mysql 142–143
- check_nagios 183–184
- check_ncnet
 - vs. check_nt 463
 - installation 480–481
- check_nrpe 462
 - changing the buffer size 194
 - for monitoring NRPE 286
 - and PNP 455
 - running plugins on third-party computers 220, 222–223
- check_nt 462, 472–487
 - vs. check_ncnet 463
 - query of NSClient+ fails 467
 - use of internal NSClient+ functions 495
- check_ntp 177–178
- check_ntp_peer 154–156
- check_ntp_time, vs. check_ntp_peer 154
- check_oracle 136, 575
- check_oracle_writeaccess 575
- check_oracle_writeaccess.sh 137
- check_pcmeasure2.pl 507–509
- check_period 64, 68
 - vs. notification_period 64
- check_pgsql 137, 139–140
- check_ping
 - vs. check_icmp 109
 - as performance killer 665
 - and Nagiosgrapher 437
 - and Windows 492
- Checkpoint firewall, monitoring 260
- check_pop 115
- check_procs 163–167
- CheckProcState (NSClient+ function) 495, 500
- check_result_path 589, 666
- check_result_reaper_frequency 589, 666, 693
- checks, on-demand 92, 95
- check_sap 514, 526
- check_sap.pl 516–518
- check_sap.sh 516
- check_sap_cons 524, 526–528
- check_sap_instance 526
- check_sap_instance_cons 526
- check_sap_multiple 526
- check_sap_mult_no_thr 526–530
- check_sap_system 526
- check_sap_system_cons 526
- check_sensors 185–186
- CheckServiceState (NSClient+ function) 495, 499
- check_simap 115
- check_smtp 101, 113, 115
 - critical limit 114
 - warning limit 114
 - for Windows 491
- check_snmp 103, 246–251
- check_snmp_cpfw 260
- check_snmp_disk 256–257
- check_snmp_env 260
- check_snmp_int 260
- check_snmp_load 260, 262–264
- check_snmp_mem 260
- check_snmp_proc 256–257
- check_snmp_process 260
- check_snmp_storage 259–262
- check_snmp_vrrp 260
- check_snmp_win 260
- check_spop 115
- check_squid 125–127
- check_ssh 131–132
 - for Windows 491
- check_swap 162
- CheckSystem.dll 467
- check_tcp 102, 132, 135
 - critical limit value 116
 - to check SAP 511
 - for FTP monitoring 119
 - to monitor SAP 516
 - for POP and IMAP monitoring 116–118
 - using SSL 134
 - warning limit 116
 - for Windows 491
- check_time 178–179
 - for Windows 491
- check_traffic 257
- check_udp 102, 135–136
 - for Windows 491
- check_ups 149, 151–154
- CheckUpTime (NSClient+ function) 495, 499
- checkuptime (NSClient+ function) 494
- CheckWMI.dll 467
- child_process_fork_twice 590
- chmod 209
- chown 209
- Cisco components, querying system load 263
- Cisco switches, monitoring 260
- CLIENTVERSION (NSClient/NC_Net command)

- 473–474
- clock times, restricting actions 74
- cluster
 - monitoring 45
 - testing 110, 189, 191
- cmd.cgi 328, 329, 343–345, 359, 367
- collect2.pl 429, 432, 437, 445
- colors, in NagiosGrapher 435
- comma-separated list *see* CSV
- command (object) 61, 72–73
- command buffer slots *see* external_command_buffer_slots
- command object
 - for e-mail notification *see* notify-by-email
 - for evaluating performance data 406, 407
- command_check_interval 590
- command_file 590
- commands
 - defining to be run in SNMP queries 243
 - for notification *see* notification command
- commands.cfg 54
- comment_file 590, 687, 694
- comments
 - in configuration files 56
 - deleting on problem hosts 332
 - looking at for hosts 340
 - looking at for services 340
 - maintaining on problem hosts 331, 343
 - nonpermanent 613, 616
- community (SNMP) 233
 - configuring for snmpd 240
 - default values 236
 - plugin option 557
 - specifying in check_snmp 247
- compilation 42
- computer
 - defining *see* host (object)
 - dependencies *see* hostdependency (object)
 - excluding from notification 270
 - grouping *see* host group (object)
 - monitor all of a user 79
 - monitoring in different network segments *see* network topology
 - network topology
 - overview of all 87
 - overview of individual 87
 - overview of individual 88
 - recommended configuration file 56
 - shutdown during power failure 182
 - states 64
- computer address, defining *see* address
- computer name, defining *see* host_name
- CONFIG (NC_Net command) 487
- config.cgi 329, 351
- config.ini.php 393–396
 - disabling the GD library 392
- config.layout 427
- config.php 450
- configuration 53–79
 - checking 81
 - for use with Nagiosgraph 411
 - for using Nagiosgraph 410
 - for using Perf2rrd 417–418
 - NagVis 393–396
 - of the NDOUtils 383
 - overview of all objects 329
 - testing 83
- configuration changes, applying 84
- configuration directory 39
- configuration files
 - cgi.cfg *see* cgi.cfg
 - checkcommands.cfg *see* checkcommands.cfg,
 - misccommands.cfg
 - for check_logs.pl 169
 - for computer 56
 - main configuration file 609
 - Nagios 2.x 55
 - Nagios 3.0 55
 - nagios.cfg *see* nagios.cfg
 - for Nagiosgraph *see* map and nagiosgraph.conf
 - nrpe.cfg *see* nrpe.cfg, drraw.conf
 - for NSCA *see* nsca.cfg
 - clients *see* send_nsca.cfg
 - for PCMeasure query software *see* pcmeasure4linux.cfg
 - for plugins 572–573
 - object-related 55
 - resource.cfg *see* resource.cfg
 - for services 56
 - for snmpd *see* snmpd.conf
 - for snmptrapd *see* snmptrapd.conf
 - syslog-ng *see* syslog-ng.conf
- configure command
 - for Nagios 40, 47
 - for NRPE 215, 220
 - for NSCA 300
- configuring, the NDOUtils 387
- contact (object) 60, 70–72, 274
 - changes in Nagios 3.x 681–682

- defining external notification programs 275
- defining notification states 272
- defining notification times 273
- disabling 58
- for single sign-on 644–645
- self-defined variables 685–686
- contact group (object) 60, 72, 271
 - changes in Nagios 3.x 681
 - macros *see* group macros
- contact groups 28
- contact persons *see* contact (object)
 - and user names for the Web interface 50
- contact sensor 506
- \$CONTACTADDRESSn\$ 629
- \$CONTACTALIAS\$ 629
- \$CONTACTEMAIL\$ 629
- \$CONTACTGROUPALIAS\$ 629
- \$CONTACTGROUPMEMBERS\$ 629
- contactgroup_members 72, 681
- \$CONTACTGROUPNAMES\$ 629
- \$CONTACTGROUPNAMES\$ 629
- contact_groups 64, 69, 680, 685
- contact macros 629
- \$CONTACTNAME\$ 629
- contact_name 70
 - reading out via macro 629
- \$CONTACTPAGER\$ 629
- contacts 678
- Cortona 349
- count (check_multifunction) 201
- counter 404
- COUNTER (NC_Net command) 483–484
- CPU load
 - caused by a program 164
 - checking 163, 165
 - memory duration (NSClient+) 469
 - monitoring in Windows 483
 - of an SAP instance 525
 - testing 102, 162
 - via SNMP 245, 246, 260, 262–264
 - in the UCD-SNMP-MIB 239
 - on Windows computers 475
- CPU runtime, of program monitoring 164
- CPU temperature, testing via SNMP 250
- CPU load
 - monitoring in Windows 467, 498
 - resolution of measured values (NSClient+) 469
- CPULOAD (NSClient/NC_Net command) 475
- crashed computer *see* DOWN (state)
- Cricket 457
- CRITICAL (state) 26, 27, 67, 96, 105, 108, 555
 - as a display criterion for status.cgi 337
 - displaying in NagVis 389
 - force/suppress notification 269
 - macro 278
 - marking in the Web interface 87
 - negating return value 188
 - resetting manually *see* error states
 - return value 168, 188, 296, 554
- critical limit *see* threshold
 - check_apc 182
 - check_by_ssh 205, 207
 - check_dig 129, 130
 - check_disk 158
 - check_file_age 181
 - check_http 119, 120
 - check_icmp 109
 - check_iftraffiq 257
 - check_ldap 143, 145
 - check_load 162
 - check_mailq 180
 - check_nt 472
 - check_ntp 177
 - check_pgsql 137
 - check_procs 163, 164
 - check_smtp 113
 - check_snmp 246
 - check_snmp_load 262
 - check_squid 125, 127
 - check_swap 162
 - check_tcp 116
 - check_ups 152
 - check_users 177
- CPULOAD 475
 - in performance data 179
 - specifying 108
- critical threshold
 - check_apc 182–183
 - check_file_age 181
 - check_iftraffiq 258
 - check_load 163
 - check_mailq 180
 - check_nt 472
 - check_ntp 178
 - check_pgsql 139
 - check_snmp 247, 251
 - check_snmp in lm-sensors 250
 - check_snmp_load 263

- check_tcp 133
- check_time 179
- check_users 177
- CPULOAD 475
- detail of performance data 179
- cron
 - as a performance accelerator 666
 - for Nagios self-monitoring 183, 184
 - used to run service checks 104
- CSMA/CD 232
- CSV, availability data as 351
- custom notifications 688
- custom templates (PNP) 455
- custom macros 633
- custom macros 626, 635
- Cygwin 461
 - plugins 490–492
 - tools 490
- D**
- Daemon Tools 419
- data backup *see* backup
- databases
 - creating for NDOutils 382
 - monitoring 136–143, 575–582
 - NDOutils update 383
 - optimizing NDOutils 667
 - saving Nagios data in *see* NDOutils
 - and service dependencies 289
 - tables for NDOutils 382
 - testing 27
- \$DATE\$ 630
- date macros 630
- date_format 58, 591
 - effect on macros 630
- dbhost (NagVis parameters) 395
- dbinstancename (NagVis parameters) 395
- dbname (NagVis parameters) 395
- db_name (ndo2db parameters) 385
- dbpass (NagVis parameters) 395
- dbport (NagVis parameters) 395
- db_port (ndo2db parameters) 385
- dbprefix (NagVis parameters) 395
- db_prefix (ndo2db parameters) 385, 395
- db_servertype (ndo2db parameters) 385
- dbuser (NagVis parameters) 395
- ddraw 420–426
- Debian
 - NDOutils installation 380
 - NET-SNMP 235
 - NRPE installation 214
 - smsclient installation 279
- debug_file 591
- debugging, internal NSClient+ functions 504
- debug_level 591
- debug_verbosity 592
- default.php (PNP) 455
- default_statusmap_layout 78, 608
- default_statuswri_layout 78, 347, 608
- default_user_name 608
- delivery number, for SMS *see* pager
- Department of Defense 229
- dependencies
 - between computers *see* hostdependency (object)
 - between NSClient/NC_Net and monitored services 474
 - between services *see* servicedependency (object)
 - circular 83
 - implied 288
- dependency_period 683
- dependend_host_name 683
- development packages 38
- DHCP, monitoring *see* check_dhcp
- dig, to monitor name servers *see* check_dig
- directory, monitoring size (Windows) 496
- display_name 678
- distributed monitoring 104, 291, 299, 317–324
- DNS, monitoring 127–130
 - name servers *see* check_dig
- documentation 53
 - linking on hosts in Nagios 364
- DOWN (state) 64, 94, 96, 269
 - as display criterion for status.cgi 336
 - macro 277
 - marking in the Web interface 87
 - return value 555
- downtime
 - flexible length 360
 - for hosts 361
 - in Nagios 3.0 687
 - planned *see* maintenance period
 - planning 362
 - scheduling 359
 - for services 361–362
 - taking into account for messages 269
- downtime_file 591, 687, 694
- drive, checking drive size *see* CheckDriveSize

- drive capacity *see* hard drive capacity
- drdraw.conf 421–422
- DSL connection, warning limit for ping 106
- du *see* check_du.pl
- dummy plugin *see* check_dummy

- E
- e-mail 71, 276, 277
 - reading out via macro 629
- e-mail address
 - for notifications *see* e-mail
 - specifying of the admin in NET-SNMP 242
- e-mail delivery command *see* notify-by-email
- e-mail server testing *see* SMTP
- editor
 - NagVis 391, 394, 396–400
- egrep
 - excluding comments and empty lines 78
- embedded Perl 40, 669–675
 - and alarm() 571
 - in Nagios 3.0 673, 688
 - and timeouts 571
- enable_event_handlers 605
- enable_flap_detection 617
- enable_notifications 592
- enable_embedded_perl 592, 673, 688
- enable_environment_macros 444, 449, 592, 667, 686
- enable_event_handlers 592
- enable_flap_detection 592, 605, 613
- enable_notifications 268, 605
- enable_predictive_host_dependency_checks 593
- enable_predictive_service_dependency_checks 593
- enable_splunk_integration 609
- encryption, NSCA 302
- ENUMCONFIG (NC_Net command) 486–487
- ENUMCOUNTER (NC_Net command) 481–482
- ENUMCOUNTERDESC (NC_Net command) 482
- ENUMPROCESS (NC_Net command) 484
- ENUMSERVICE (NC_Net command) 484
- environment variables *see* variables
- EPN *see* Embedded Perl
- epoch seconds 479
- error messages 83
 - in NSClient installation 464
 - interval *see* notification_interval
 - restricting number of 95
- error states, resetting manually 310–312
- escalation management 28, 282–285
 - for computers *see* hostescalation (object)
 - for services *see* serviceescalation (object)
- escape_html_tags 609, 692
- Ethernet 232
- event broker 42, 593
- event handler 619–623
 - vs. OSCP and OCHP 317
- event log *see* Windows event log
- Event Broker *see* NEB
 - API 378
 - NDOUtils configuration 383–385
- event_broker_options 377, 593, 667
- EventDB 531–549
- event_handler_timeout 593
- EVENTLOG (NC_Net command) 485–486
- EventLog Agent for Windows *see* nagevtlog
- Eventlog to Syslog *see* evtvsys
- events
 - as histogram 353
 - processing 531–549
 - showing graphically *see* histogram.cgi
- evtsys 545
- Exchange for Nagios addons 102
 - addons for managing maintenance times 359
 - logos and icons 365
 - NagiosGrapher 427
 - network plugins 125
 - NRPE plugins for Windows 490
 - NSClient 464
 - Oracle plugin 137
 - ping plugin for Windows 492
 - proxy test 125
 - SNMP plugins 255
 - Squid test 125
- Exchange Server
 - monitoring 113
 - and port 1248 469
- execute_service_checks 605
- execute_host_checks 593
- execute_service_checks 593
- Exim, monitoring mail queue 180
- exit code *see* return value
- export, of data from Nagios 378
- External Command File 292
- external_command_buffer_slots 593, 667
- extinfo.cgi 193, 329, 331, 339–342, 359, 615, 616
 - adding additional information 363

- F
- failed logins, monitoring on 168

- failure
 - of partial networks 329
 - of subnetworks 345
 - fans, monitoring of switches 260
 - Fast Ethernet interface, monitoring traffic 258
 - Fedora, NRPE installation 214
 - fe_use_browser_all (NagiosGrapher) 435
 - fe_use_browser_for (NagiosGrapher) 436
 - fe_use_browser_url (NagiosGrapher) 436
 - fe_use_timefilter (NagiosGrapher) 436
 - FHS 41
 - FIFO 292
 - fifo_write.pl 432, 444
 - file
 - changing owner *see* chown
 - changing permissions *see* chmod
 - monitoring modification date *see* check_file_age
 - monitoring size (Windows) 467
 - monitoring via SNMP 239
 - size monitoring *see* check_file_age
 - FILE2SOCK 379
 - FILEAGE (NSClient/NC_Net command) 479–480
 - FileLogger.dll 467
 - file_rotation_command (ndomod parameters) 384
 - file_rotation_interval (ndomod parameters) 384
 - file_rotation_timeout (ndomod parameters) 384
 - Filesystem Hierarchy Standard *see* FHS
 - Firefox, single sign-on via 650–651
 - firewall, environments indirect tests in 225, 287
 - First Level Support, informing of problems 282
 - first_notification_delay 271, 678
 - flap detection *see* flapping
 - flap_detection_enabled 614, 617
 - flap_detection_options 679, 680, 687
 - flapping (state) 64, 269, 278, 611–617, 679, 687
 - as a display criterion for status.cgi 337
 - host 616–617
 - with services 612, 616
 - font color (NagiosGrapher) 435
 - fontfile (NagiosGrapher) 433
 - format, configuration files for plugins 573
 - Foundry switches, monitoring 260
 - free_child_process_memory 594
 - FREEDISKSPACE (NC_Net command) 487
 - freeWRL 349
 - frequency, of a state representing graphically *see* histogram.cgi
 - freshness mechanism 287, 295–297, 692
 - accounting for latency 586
 - FTP, monitoring 118–119
- G**
- gettext 557
 - global_host_event_handler 594
 - global_service_event_handler 594
 - graphics
 - adding to Nagios Web page 61
 - addressing directly in PNP 452
 - green (state) 26
 - grid color (NagiosGrapher) 435
 - group (NagiosGrapher) 432
 - group macros 628, 629
 - groupadd 209
 - groups, creating 209
- H**
- hard drive capacity
 - checking 158
 - checking with SNMP 248
 - displaying graphically 414
 - monitoring with SNMP 260
 - testing 102, 162
 - on Windows computers 476–477, 487
 - with SNMP 244–245, 256, 259, 262
 - of Windows hosts displaying graphically 414
 - hard recovery 97
 - hard state 63, 68, 92, 96, 267, 614
 - as evaluation criterion for NagVis 391, 394, 399
 - macro 628
 - header files *see* development packages
 - health check *see* lm-sensors
 - heartbeat (NagiosGrapher) 432
 - help, online (plugins) 78, 556–557
 - Help Desk, informing of problems 282
 - high_flap_threshold 617
 - high_host_flap_threshold 594, 617
 - high_service_flap_threshold 594, 613
 - histogram.cgi 329, 353–354
 - history.cgi 329, 354–355
 - hitlist, problematic hosts 357
 - host 26
 - excluding from notification 681
 - host (object) 59, 62–65
 - changes in Nagios 3.x 678–680
 - extended information 362–366
 - host-specific variables 471
 - self-defined variables 685–686
 - host check 26, 46, 63, 94

- active 95, 291
- beyond reachability tests 112
- with check_icmp 111–112
- optimizing 664
- passive 291–295, 311, 488, 666, 690
- vs. ping service 66, 83, 95
- resetting error state manually *see* error states
- host dependencies 285
- host dependency (object) 289
- host group
 - display in NagVis 390
 - downtime for all services of 361
 - inserting into NagVis map 398
 - macros *see* group macros
 - showing in the status display 334
 - viewing in the NDOutils database 387
- host group (object) 59, 65–66, 77
 - applying with NRPE 223, 224
 - changes in Nagios 3.x 681
 - selecting for status display 334
- host macros 628
- host MIB 238
- host name
 - defining *see* host_name
 - defining (plugin option) 108
- host_name 277
- \$HOSTACKAUTHORS\$ 635
- \$HOSTACKCOMMENTS\$ 635
- \$HOSTADDRESS\$ 73, 111, 625, 627
- \$HOSTALIAS\$ 627
- host_check_timeout 594
- hostdependency (object) 61
 - changes in Nagios 3.x 683
- hostescalation (object) 61, 283, 284
 - changes in Nagios 3.x 683–685
- \$HOSTEVENTID\$ 686
- hostextinfo (object) 61, 347, 362–366, 677
 - changes in Nagios 3.x 679
- host_freshness_check_interval 594
- hostgroup_name 67
- \$HOSTGROUPALIAS\$ 629
- \$HOSTGROUPMEMBERS\$ 629
- hostgroup_members 681
- \$HOSTGROUPNAMES\$ 629
- hostgroup_name 65, 77
- \$HOSTGROUPNAMESS\$ 629
- hostgroups (configuration parameter) 63
- host_inter_check_delay_method 594
- \$HOSTLONGOUTPUT\$ 627
- host macros 627
- \$HOSTNAMES\$ 627
- host_name 63, 67, 76, 363
 - access via macro 627
- host_notification_commands 71
- \$HOSTNOTIFICATIONID\$ 686
- \$HOSTNOTIFICATIONNUMBER\$ 630, 686, 693
- host_notification_options 71
- host_notification_period 70
- host_notifications_enabled 681
- host_notifications_options 681
- host_notify-by-email 275, 277–278
- host_notify-by-sms 275
- host objects
 - host-specific variables 685–686
 - viewing in the NDOutils database 387
- \$HOSTOUTPUT\$ 193, 627, 635
- \$HOSTPERFDATA\$ 193, 627, 635
- host_perfdata_command 407, 595
- host_perfdata_file 595
- host_perfdata_file_mode 595
- host_perfdata_file_processing_command 595
- host_perfdata_file_processing_interval 595
- host_perfdata_file_template 596
- hosts
 - availability statistics *see* avail.cgi
 - extensive information on individual 339
- \$HOSTSTATES\$ 626, 627
- \$HOSTSTATEID:*\$ 190
- \$HOSTSTATEIDS\$ 627
- \$HOSTSTATETYPE\$ 627
- htmlbase (NagVis parameters) 395
- htmlcgi (NagVis parameters) 395
- htpasswd 50, 70
- HTTP
 - header, manipulating 101
 - monitoring 118–125
 - testing 101
- humidity, monitoring 505–509
- I
- I2C 185
- icon, adding your own in the Web interface *see* icon_image
- icon_image 364
- icon_image_alt 365
- icon_image_script (NagiosGrapher) 434
- icon_image_src (NagiosGrapher) 434
- icon_image_static (NagiosGrapher) 434

- icon_image_tag (NagiosGrapher) 433
 - icons (NagVis parameters) 394
 - ident daemon *see* identd
 - identd 138
 - monitoring 491
 - illegal_macro_output_chars 449, 596
 - illegal_object_name_chars 596, 635
 - IMAP
 - monitoring 113, 115–118
 - via SSL/TLS 115–118
 - IMAP3S *see* IMAP via SSL/TLS
 - imprecision, in SNMP *see* rounding up
 - increase in performance *see* performance optimization
 - indirect checks 206, 224–225, 287
 - inetd
 - configuration for NRPE 217, 304
 - function check for NRPE 218
 - inheritance 684–685
 - of dependencies 287
 - init script 43, 84
 - initial_state 679, 680
 - inject 494–504
 - installation 37–45, 292
 - check_ncnet 480–481
 - drraw 420
 - isapinfo 512
 - Nagiosgraph 408
 - NagVis 391–393
 - NC_Net 465
 - NDOUtils 380–383
 - NRPE 214–216
 - NRPE_NT 488–489
 - NSCA 300–301
 - NSClient 464–465
 - Perf2rrd 416
 - PNP 447
 - RRDtools 421
 - instance_name (ndomod parameters) 384, 395
 - INSTANCES (NC_Net command) 482
 - instant client (Oracle) *see* Oracle
 - interface
 - between Nagios and NDOUtils *see* NEB
 - for external commands 28, 49, 101, 104, 208, 292–293, 299, 343–345, 661, 687
 - interface (NagiosGrapher) 431
 - and service_perfddata_command 443–445
 - Internet services, testing 101–102
 - Internet Standard Management Framework 228
 - interval
 - between error messages *see* notification_interval
 - between error notifications *see* notification_interval
 - between service checks 68
 - interval check 270, 273
 - interval_length 596, 678
 - IP address
 - defining *see* address
 - defining (plugin option) 108
 - IPv4 stipulating 108
 - check_http 123
 - IPv6 stipulating 108
 - check_http 123
 - ISDN
 - connection, warning limit for ping 106
 - sending SMS via 280
 - ISO (organization) 229
 - is_volatile 309, 311, 316, 486
- J**
- jitter 154, 156
- K**
- Kerberos 639–644
 - configuration for single sign-on 642–643
 - and time synchronization 178
- L**
- language
 - of plugin output 557
 - setting for NagVis 394
 - language (NagVis parameters) 394
 - large_installation_tweaks 691
 - \$LASTHOSTEVENTID\$ 686
 - \$LASTHOSTSTATE\$ 686
 - \$LASTHOSTSTATEID\$ 686
 - \$LASTSERVICEEVENTID\$ 686
 - \$LASTSERVICESTATE\$ 686
 - \$LASTSERVICESTATEID\$ 686
 - latency time 653–662, 666
 - for checks 452
 - for freshness -checks 586
 - for service checks 658
 - layout
 - NagiosGrapher 427
 - Nuvola 368–373
 - LDAP *see* OpenLDAP
 - monitoring *see* check_ldap

- legend (NagiosGrapher)
 - column width 439
 - line break 439
 - libraries, required for compiling 38
 - license, of plugins 559
 - limit *see* critical limit, warning limit
 - limit value, critical 108
 - check_by_ssh 207
 - lm-sensors 184–186
 - information in the UCD-SNMP-MIB 239
 - reading out information via SNMP 250
 - specifying thresholds 250
 - temperature query via SNMP 250
 - load, of a network interface *see* check-iftraffic
 - load distribution 192
 - load status, of a UPS 182
 - localhost.cfg 54, 74
 - localization, of plugins 557
 - lock_author_names 609, 692
 - lock_file 596
 - log file entries
 - configuring for NSClient+ 468
 - generating 405–407
 - graphical overview of *see* showlog.cgi
 - incomplete 351
 - for NSCA 302
 - log files
 - evaluating *see* syslog
 - evaluating Windows event log 485–486, 502
 - filtering after states *see* history.cgi
 - for NagiosGrapher 434, 445
 - importing old to the NDO database 379
 - monitoring *see* check_log
 - monitoring the Nagios log file *see* check_nagios
 - PIPE entry 446
 - PRG entry 446
 - REGEX entry 446
 - RRD entry 446
 - search engine 609
 - search engine 609
 - VALUES entry 446
 - log_file (NagiosGrapher) 434
 - LOG2NDO 379
 - log_archive_path 596
 - logcheck 307
 - log_event_handlers 597
 - log_external_commands 597
 - log_file 597
 - logger 172
 - log_host_retries 597
 - log_initial_state 354
 - log_initial_states 597
 - logins, failed *see* failed logins
 - log_level (NagiosGrapher) 435, 445
 - log_notifications 597
 - log_passive_checks 597
 - log_rotation_method 355, 597
 - log_service_retries 598
 - \$LONGDATETIME\$ 630
 - \$LONGHOSTOUTPUT\$ 193, 635, 686
 - \$LONGSERVICEOUTPUT\$ 193, 686
 - low_service_flap_threshold 598
 - low_flap_threshold 614, 617
 - low_host_flap_threshold 598, 617
 - low_service_flap_threshold 613
 - lpd, restarting automatically on failure 619–623
- ## M
- Mac OS X, monitoring 461
 - macros 73, 79, 277–278, 625–635, 686
 - \$ADMINEMAIL\$ 586
 - \$ADMINPAGERS\$ 587
 - \$HOSTATTEMPT\$ 621
 - \$HOSTSTATETYPE\$ 621
 - \$HOSTSTATES\$ 621
 - \$SERVICEATTEMPT\$ 621
 - \$SERVICESTATETYPE\$ 621
 - \$SERVICESTATES\$ 621
 - \$USERx\$ *see* \$USERx\$ macros
 - and performance 667
 - contact 629
 - custom 626, 633–635
 - for statistical purposes 631
 - group 628–629
 - host 627–628
 - notification 630
 - on-demand 190, 626, 629, 632–633
 - service 628
 - standard 626–632
 - state *see* state macros
 - to specify date 630
 - to specify time 630
 - used in e-mail delivery 277
 - mail queue, monitoring *see* check_mailq, *see* check_mailq
 - mail server testing *see* SMTP
 - mailing lists, nagiosplug-help 45
 - main configuration file *see* nagios.cfg

- main memory
 - in the Host Resources MIB 238
 - monitoring with SNMP 259–262
 - testing on Windows computers 476
 - usage monitoring 164
 - main_config_file 78, 609
 - maintenance window
 - addons for maintenance 359
 - display in the Web interface 337, 342
 - for hosts 360
 - sending notification 679
 - status 65
 - make options 42, 54
 - all 42
 - install 42
 - install-commandmode 42
 - install-config 42
 - install-init 43, 84
 - man page, for plugins 566–568
 - Management Information Base *see* MIB
 - management nodes (SNMP) *see* nodes
 - manager (SNMP) 228
 - manufacturer MIB 251
 - map 408, 412–415
 - map (NagVis) 390, 396–400
 - maplocktime (NagVis parameters) 394
 - max_check_attempts 63, 67, 68, 97, 267, 614, 620, 689, 690
 - in connection with log file monitoring 167
 - representation Web interface 87
 - max_check_result_file_age 598
 - max_check_result_reaper_time 598, 666
 - max_concurrent_checks 598
 - max_debug_file_size 599
 - max_eventhandlers_age (ndo2db parameters) 385
 - max_hostchecks_age (ndo2db parameters) 385
 - max_host_check_spread 84, 599
 - max_servicechecks_age (ndo2db parameters) 385
 - max_service_check_spread 84, 599
 - max_systemcommands_age (ndo2db parameters) 385
 - max_timedevents_age (ndo2db parameters) 385
 - maxtimewithoutupdate (NagVis parameters) 395
 - mbrowse 237
 - measured values, displaying over time 29
 - measuring temperature, as a host check 112
 - members 65, 70, 77
 - memory
 - checking for Windows computers 467
 - checking for Windows hosts *see* CheckMem
 - monitoring 165
 - MEMUSE (NSClient/NC_Net command) 476
 - messages 63
 - stopping *see* notifications_enabled
 - MIB 228
 - of the manufacturer 251
 - MIB-II 231–233, 238
 - Microsoft Exchange Server 113
 - Microsoft Windows *see* Windows
 - misccommands.cfg 276, 320
 - modification date, of a file monitoring *see* check_file_age
 - monitoring temperature, of switches 260
 - Montibello, Tony 465
 - movement detector 506
 - Mozilla Firefox *see* Firefox
 - MRTG 29, 259, 658–660
 - MTA, monitoring *see* check_smtp
 - Munin 29
 - MySQL
 - creating a database 141
 - monitoring 141–143
 - preparing for use with NDOUtils 381–383
 - standard port 385
 - starting in network mode 141
 - version for use with NDOUtils 380
- N
- nagcmd (group) 38
 - nagevtlog 545
 - Nagios
 - monitoring *see* self-monitoring
 - reload 417
 - restarting *see* restart
 - stopping 340
 - nagios (group) 38
 - nagios (program) 81–83
 - start via start script 84
 - nagios (user) 38
 - read permissions when using check_log 168
 - Nagios Exchange *see* Exchange for Nagios addons
 - Nagios Remote Plugin Executor *see* NRPE
 - Nagios Service Check Acceptor *see* NSCA
 - nagios-snmp-plugins 256–257
 - nagios.cfg 54–62, 268, 367, 586–606
 - activating freshness checking 295
 - allowing passive host checks 294
 - configuration for Nagiosgraph 410

- defining time unit 62
- ePN parameters 673
- flap detection 613, 617
- integrating NEB modules 377
- loading Event Broker module 386
- log rotation 355
- NDOUtils configuration 383
- passive service checks 293
- processing performance data 405–407
- switching on OSCP/OCHP 318
- switching on processing of external commands 293
- NAGIOS_CGI_CONFIG (environment variable) 78
- nagios_config (NagiosGrapher) 433
- Nagiosgraph 404, 408–415
 - debug level 410
 - delimiter 407
- nagiosgraph.conf 409–410
- NagiosGrapher 404, 426–446
 - configuration 430–446
 - installation 427–430
- nagios_grapher (start script) 429, 437
- nagios_group 599
- NAGIOS_HOSTNAME 444
- NAGIOS_SERVICEDESC 444
- NAGIOS_SERVICEOUTPUT 444
- NAGIOS_SERVICEPERFDATA 444, 449
- nagiosstats 654–658
 - using in plugins 660–662
- nagios_user 599
- nagtrap 532
- NagVis 376, 378, 389–401
 - configuration 393–396
 - database permissions 382
 - installation 391–393
 - ndo2db configuration 386
 - obsolete status data 396
 - problems with Nagios <3.0b1 396
 - required Broker data 378
 - without authentication 396
- Name server *see* DNS
- named pipe 104, 292, 590
 - creating a 417
 - for NagiosGrapher 432
 - for NSCA 302
 - problems with Nagios 2.0 beta 420
- navigation area 328
 - customizing 338
- NC_Net 462, 465, 472, 488
 - changing configuration 487
 - defining the Performance Counter 482
 - installation 465
 - listing services 484
 - monitoring age of a file 479–480
 - monitoring processes 479
 - monitoring processor load 483
 - monitoring uptime 477
 - monitoring Windows services 478
 - polling the Performance Counter 481
 - querying client version 473–474
 - querying configuration 486–487
 - querying event log 485–486
 - querying Performance Counter 483–484
 - querying process list 484
 - querying WMI database 487
 - testing CPU load 475
 - testing hard drive capacity 476–477, 487
 - testing main memory 476
- ndo2db
 - configuration file *see* ndo2db.cfg
 - starting 386
- ndo2db.cfg 383, 385–386
- ndo2db daemon 378
- ndo2db_group (ndo2db parameters) 385
- ndo2db_user (ndo2db parameters) 385
- ndomod 378, *see* Event Broker
- ndomod.cfg 383–385
- NDOUtils 375–387
 - distributed databases 396
 - installation 380–383
 - optimizing database 667
- NEB 376–378
 - API 378
- negate 188–189
 - for Windows 491
- negation, of threshold details 558
- .NET, querying configuration data 487
- NET-SNMP 234, 246, 312
 - configuration *see* snmpd.conf
 - defining system and local information 242
 - plugins specialized in ~ 256
 - special features in the check_snmp_load call 263
- NET-SNMPD 103
- netstat 218
- network, detecting outages 94
- network connection, slow warning limits 106
- network interfaces
 - monitoring via SNMP 103, 251

- testing load *see* check-iftraffic
- network outages 94
- network segments 93
- network services, testing 101–102
- network share, checking drive size (Windows) *see* CheckDriveSize
- network topology
 - accounting for 65
 - taking into account 27–95
- network traffic, observing *see* check-iftraffic
- Network UPS Tools 149–154
- new_mini_epn 674–675
- ngraph (object) 437–440
- ngraph.ncfg 430–440
- nmbd, monitoring 163
- nodes 231
- nodes (SNMP) 229
- Nokia-VRRP cluster, monitoring 260
- normal_check_attempts 68
- normal_check_interval 68, 96, 341, 614, 678, 680
- notes 363
- notes_url (Nagios) 364, 366, 434, 692
- notes_url (NagiosGrapher) 433
- notes_url_target 609, 692
- notification
 - commands 71
 - macros 630
 - preventing 65
 - self-made 688
- notification command 71
 - defining 275–282
- notification_interval 64, 68, 270, 273, 282, 680, 685
 - for escalation 284
- \$NOTIFICATIONNUMBER\$ 686, 693
- notification_options 64, 69, 679, 680, 687
 - in case of escalation 284
 - in connection with check_log 168
- notification_period 64, 68, 270, 273, 282, 680, 685
 - in case of escalation 284
- \$NOTIFICATIONRECIPIENTS\$ 630
- notifications 28, 265–290
 - as a display criterion for status.cgi 337
 - commands 71, 275
 - globally switching on and off 344
 - graphic overview *see* notifications.cgi
 - looking at sent *see* notifications.cgi
 - periodic *see* interval check
 - preventing 340
 - stopping in general *see* enable_notifications
 - switching off for hosts of a group 339
 - time interval *see* notification_interval
- notifications.cgi 329, 355–356
- notifications_enabled 269
- notification_timeout 599
- \$NOTIFICATIONTYPE\$ 278, 630, 688
- notify-by-email 275, 276, 278
- notify-by-sms 275, 281–282
- NPCD 448, 453
- npcd.cfg 448, 453
- NRPE 102–103, 213–225
 - adjusting buffer size 194
 - buffer size adjusting 194
 - example of service dependencies 285
 - and timeouts 559
 - for Windows *see* NRPE_NT, 488
 - with NSClient+ 465, 467
 - function test 218, 221–222
 - monitoring 286
 - with NSClient+ 493
 - with OpMon Agent 470
- nrpe.cfg 215, 218–221
 - for Windows 489, 491
- NRPEListener.dll 467
- NRPE_NT 463, 488
 - configuration 489
 - installation 488–489
 - replacing with NSClient+ 467
- NSC.ini 466–469, 493–495
- NSCA 104, 291, 299–316
 - client configuration 304–305
 - configuring the Nagios server 301–304
 - daemon 299
 - encryption 302
 - installation 300–301
 - processing SNMP traps 312
 - testing functionality 306
- nsca.cfg 301–303
- NSClient 101, 464–465
 - installation 464–465
 - monitoring the age of a file 479–480
 - monitoring processes 479
 - monitoring uptime 477
 - monitoring Windows services 478
 - querying the client version 473–474
 - querying performance counters 480
 - and service dependencies 289
 - testing CPU load 475
 - testing hard drive capacity 476–477

- testing main memory 476
 - NSClient+ 465–469, 493–495
 - internal functions 495–504
 - NRPE 493–504
 - querying performance counter 501
 - NSClientListener.dll 467
 - nsclientpp 466
 - nslookup, to check name services *see* `check_dns`
 - NTPM 638
 - NTP
 - for monitoring system time *see* `check_ntp`
 - monitoring server 154–156
 - ntpq 154
 - NTsyslog 545
 - nut 150
 - Nuvola (layout) 368–373
- O**
- object 59–62
 - object definitions
 - displaying *see* `config.cgi`
 - for Nagios 2.10 54
 - for Nagios 3.0 54
 - object identifier *see* OID
 - object types 59–61
 - object_cache_file 599
 - obsessive commands 317
 - obsess_over_hosts 318, 319, 600
 - obsess_over_services 318, 319, 323, 600
 - OCHP 317–321
 - ochp_command 318, 600
 - ochp_timeout 318, 600
 - OCSF 317–321
 - ocsp_command 318, 600
 - ocsp_timeout 318, 600
 - offset (for NTP) 154
 - OID 230
 - converting to legible text *see* `SNMPTT`
 - querying 235–237
 - OK (state) 27, 67, 96, 105, 555
 - displaying in NagVis 389
 - macro 278
 - negating return value 188
 - return value 188, 554, 555
 - on-demand checks 92, 95
 - on-demand macros 190, 626, 629, 632, 633
 - onlyhardstates (NagVis parameters) 394, 399
 - OpenLDAP
 - monitoring 164
 - restart by event handler 623
 - OpenNMS 312
 - OpenSSH 206
 - OpenVRML 349
 - operating status, of a network interface testing 254
 - OpMon Agent 469–470
 - opmonagent.ini 470
 - OR link, for `check_multi` 200
 - Oracle
 - instant client 576–577
 - monitoring 136, 137, 575–582
 - orphaned service 589
 - outages, detecting in network 94
 - outages.cgi 329, 350
 - output (ndomod parameters) 384
 - output_buffer_items (ndomod parameters) 384
 - output_type (ndomod parameters) 384
- P**
- p1.pl 674
 - pager 276
 - parallelize_check 680
 - parents 65, 83, 93, 289, 361
 - passive mode
 - check_by_ssh 208
 - passive_host_checks_are_soft 600, 690
 - password
 - in SNMP 234
 - obscuring (NSClient+) 468
 - setting for `check_nt` (NSClient+) 468
 - specification in plugins 557
 - password file, for logging in to the Web front end *see* `htpasswd`
 - PCAnywhere, monitoring 134
 - PCmeasure (sensor query program) 507
 - PCmeasure4linux.cfg 506
 - PDH error message, during NSClient installation 464
 - PENDING (state) 610
 - as criterion for service dependencies 287
 - as display criterion for `status.cgi` 336–337
 - Perf2rrd 415–420
 - perfdata_timeout 601
 - perffile_path (NagiosGrapher) 432
 - Performance Counter 481
 - defining 481–482
 - querying 482–484
 - Performance Counter instances 482
 - performance data 107, 118, 403–457, 559
 - displaying with Nagios::Plugin 572

- format 404
- for overall system 346
- processing intelligently 663
- processing through an external command 407
- separating string 572
- processing via template 405–407
- performance data processing, switching on *see* process_performance_data
- performance problems, of Nagios revealing 341
- performance counter
 - determining 480
 - querying 501
- performance optimization 653–668, 691
- PerfParse 446
- periodic notification *see* interval check
- Perl 669
 - developing plugins in 553–573, 670–672
 - Embedded *see* Embedded Perl
 - ICP::Open2 module 578
 - modules, installing 45
 - plugins for Windows 492–493
 - searching in ~ 412
 - for Windows 492
- Perl script, as a plugin 27, 553–573, 670–672
- permissions, changing on file *see* chmod
- PerParse 456
- PHP, disabling the GD library 392
- physical_html_path 78, 609
- pidfile (NagiosGrapher) 432
- ping 46, 63, 66, 83, 108
 - check for Windows 492–493
 - warning limits 106
- PIPE (log entry) 446
- pipe (NagiosGrapher) 432
- plugin 99, 101–103, 107
 - configuration files 572–573
 - developing as shell script 660–662
 - developing in Perl 553–573, 672
 - executing via SSH 102
 - generic 102, 132–136
 - help 556–557
 - local 102
 - multi-line output 692
 - multiple-line output 193
 - Oracle 578–582
 - return value 554–555
 - running via NRPE *see* NRPE
 - running via SSH 102, 205–211
 - service-specific vs. generic 101–102
 - timeout 558–559, 571–572
 - wrapper 578–582
 - writing your own 553, 660–662
- plugins 27
 - check_icmp *see* check_icmp
 - developing in Perl 670
 - directory 73
 - documentation 107
 - downwards compatibility 30
 - echo, getting return value 168, 188, 256, 477, 480, 490
 - help 107
 - installation 43–45
 - manipulating output 189
 - negating output *see* negate
 - for network services 108–154
 - path to 79
 - performance data 107
 - return status 105
 - return value 96, 188
 - running through SSH 488
 - for special tasks 187
 - specifying host name 108
 - specifying IP address 108
 - standard options 108, 185
 - states 27, 96
 - testing 45–47
 - timeout 106, 108
 - version information 108
 - writing your own 575
- PNP 446–456, 662
 - addressing graphic directly 452
 - batch processing of performance data 452–454
 - defining time period 451
 - and extended performance output 198–199
- pNSClient.exe 464
- POD 566–568
- POP3
 - monitoring 113, 115–118
 - via SSL/TLS 115–118
- POP3S *see* POP3 via SSL/TLS
- port
 - MySQL 385
 - problems with NSClient & Co. 471, 634
 - specification in plugins 557
- port (NagiosGrapher) 432
- port scan, as a host check 112
- Postfix, monitoring mail queue 180
- PostgreSQL

- creating a database 137
 - creating a database user 137
 - monitoring 137–140
 - starting in network mode 137
 - testing database 27
 - postponing, tests 342
 - power failure, shutdown computer 182
 - power supply, monitoring for switches 260
 - precached_object_file 601, 691
 - precaching, of the Nagios self-test 691
 - PRG (log entry) 446
 - printer service, restarting automatically on failure 619–623
 - priority, of states in NagVis 390
 - problem, taking on 332
 - PROCESS_HOST_CHECK_RESULT 305
 - process_performance_data 407
 - PROCESS_SERVICE_CHECK_RESULT 305
 - processes
 - information in the host MIB 238
 - listing in Windows 484
 - monitoring *see* check_procs
 - in Windows 479
 - via SNMP 256, 260
 - specifying, to be monitored via SNMP 243
 - PROCESS_FILE 687
 - PROCESS_HOST_CHECK_RESULT 292, 295
 - processor load *see* CPU load
 - process_perfddata.cfg 448
 - process_perfddata.pl 447–449, 453
 - process_perfddata_command 407
 - process_performance_data 405, 410, 448, 601
 - PROCESS_SERVICE_CHECK_RESULT 104, 292, 294, 661
 - PROCSTATE (NSClient/NC_Net command) 479
 - programming
 - plugins in Perl 553, 573, 670
 - plugins as shell scripts 660–662
 - proxy, monitoring *see* Squid
 - pseudo-tests, for freshness checks 296
 - public-key login 208
- Q**
- QMail, monitoring mail queue 180
 - questionable status *see* WARNING (state)
 - queues, on mail server *see* mail queue
- R**
- RAM *see* memory
 - ranking list *see* hitlist
 - Reaper 666
 - reboot *see* restart
 - recognizeservices (NagVis parameters) 394, 399
 - reconnect_interval (ndomod parameters) 384
 - reconnect_warning_interval (ndomod parameters) 385
 - recovery
 - after error 97
 - notification 168
 - state 64, 269
 - red (state) 26
 - redirect, reaction of the check_http plugin 121
 - redundant systems, testing 189–191
 - refresh_rate 78, 609
 - refreshtime (NagVis parameters) 394
 - REGEX (log entry) 446
 - regexps *see* regular expressions
 - registry
 - changing NSClient parameters 465
 - managing NSClient+ parameters 468
 - regular expressions
 - allowing + in nagios.cfg 606
 - in check_http 121
 - in check_logs.pl 170
 - in check_snmp 247, 248, 250
 - with egrep 219
 - in event log 485
 - in Nagiosgraph 412
 - in NagiosGrapher 438, 441
 - in Perl 412
 - reload, of the system 84
 - repeat *see* test repeat
 - replay attacks, on NSCA 302
 - rescheduling, automatic 270, 274, 275
 - resource.cfg 54, 55, 73, 79, 249, 626
 - resource_file 601
 - response.php (PNP template) 455
 - responsible person *see* contact (object)
 - restart
 - failed services 619
 - of Nagios server 340, 367
 - retain_nonstatus_information 368
 - retain_state_information 354, 367, 601
 - retain_status_information 368
 - retention 367–368
 - retention_file 694
 - retention_update_interval 183, 601
 - retry_check_interval 68, 97, 614, 620, 680

- retry_interval 68, 96, 679, 680
 - return status, of plugins 105
 - return value
 - forcing the defined *see* check_dummy
 - of plugins determining with echo 168, 188, 256, 477, 480
 - return value
 - of Perl plugins 671
 - of plugins 554–555
 - reverse Polish notation *see* RPN
 - RFCs
 - 1065–1067 (SNMP) 233
 - 1155 (Internet namespace) 231
 - 1155–1157 (SNMP) 233
 - 1212 (format of an MIB) 231
 - 1213 (MIB-II) 238
 - 1901–1908 (SNMPv2c) 233
 - 1905 (SNMPv2) 233
 - 2790 (Host-MIB) 238
 - 3410 (SNMP) 229
 - 3411 (SNMP) 229
 - 3411–3418 (SNMPv3) 233
 - 3414 (USM) 234
 - 3415 (VACM) 234
 - root property 573
 - round-robin archive 423
 - round-robin database 408
 - to assess network traffic 257
 - creating with Perf2rrd *see* Perf2rrd
 - evaluating graphically *see* ddraw
 - for sensor data 508
 - rounding up, in SNMP 249
 - router, monitoring network interfaces 251
 - RPN 441
 - RRA *see* round-robin archive
 - rra.cfg 448
 - RRD *see* round-robin database
 - RRD (log entry) 446
 - rrd_color_* (NagiosGrapher) 435
 - rrdpath (NagiosGrapher) 433
 - RRDs (Perl module), using with PNP 448
 - RRDtools 420, 447
 - CDEF *see* CDEF
 - configuration for PNP 455
 - installation 421
 - RSH 102
- S
- Samba, monitoring 163
 - same host dependency 289, 683
 - SAP
 - CCMS plugins *see* CCMS plugins
 - detecting application server 515, 526
 - interface for Nagios plugins 523–525
 - monitoring 511–530
 - monitoring system *see* CCMS
 - querying application server 513–515
 - querying message server 513–515
 - SAP instance 524, 527
 - SAPCAR 512
 - sapinfo 511–518
 - scheduled downtime (status) 65
 - scheduling 84, 453, 559
 - ScriptAlias (Apache) 47
 - search, in the Web interface 87
 - search engine, for log files 609
 - Second Level Support, informing of problems 282
 - Secure Shell *see* SSH, *see* SSH
 - segment limits, defining for a network 93
 - self-healing, through event handlers 619
 - self-monitoring 164, 183
 - SELinux 48–49
 - SEND_CUSTOM_HOST_NOTIFICATION 688
 - SEND_CUSTOM_SVC_NOTIFICATION 688
 - Sendmail, monitoring mail queue 180
 - send_nscd 104, 299, 304–306, 319
 - using with syslog-ng 309
 - send_nscd.cfg 304–305
 - sensors, monitoring *see* lm-sensors
 - service (object) 60, 66–69, 76–77
 - changes in Nagios 3.x 680–681
 - extended information 362, 366
 - self-defined variables 685–686
 - service check 26, 99–104
 - active 291
 - active preventing 293
 - active switching 343
 - command used 67
 - direct 101–102
 - vs. host check 612
 - via NRPE *see* NRPE
 - passive 291–294, 311, 488
 - passive as a display criterion for status.cgi 337
 - reachability 111
 - resetting error state manually *see* error states
 - via SSH 102
 - service checks
 - active 100

- via cronjobs 104
- passive 101, 104
- via NSCA 104
- via SMTP 103–104
- service dependencies 285–289
- service dependency (object) 285–289
- service group
 - display in NagVis 390
 - macros *see* group macros
 - showing, in the status display 334
 - viewing in the NDOUtils database 387
- service group (object) 60, 69–70
 - changes in Nagios 3.x 681
 - selecting for status display 334
- service groups 67
- service objects, viewing in the NDOUtils database 387
- service check
 - via cron jobs 666
 - frequency 662
 - passive 660, 666
- service_check_timeout 602
- servicedependency (object) 61
 - changes in Nagios 3.x 683
 - in NSClient/NC_Net 474
- \$\$SERVICEDESC\$ 628
- service_description 67, 680
 - access via macro 628
- serviceescalation (object) 61, 283–285
 - changes in Nagios 3.x 683–685
- \$\$SERVICEEVENTID\$ 686
- serviceextinfo (object) 61, 362, 366, 452, 677
 - changes in Nagios 3.x 679
 - generating with NagiosGrapher 426, 433
 - integrating ddraw graphics into Nagios 425
 - for Nagiosgraph 411
- serviceext_type (NagiosGrapher) 433
- service_freshness_check_interval 602
- \$\$SERVICEGROUPALIAS\$ 629
- \$\$SERVICEGROUPMEMBERS\$ 629
- servicegroup_members 70, 681
- \$\$SERVICEGROUPNAME\$ 629
- servicegroup_name 70
- \$\$SERVICEGROUPNAMES\$ 629
- service_inter_check_delay_method 602
- service_interleave_factor 602
- \$\$SERVICELONGOUTPUT\$ 628
- service macros 628
- service_notification_commands 71
- \$\$SERVICENOTIFICATIONID\$ 686
- \$\$SERVICENOTIFICATIONNUMBERS\$ 630, 686, 693
- service_notification_options 71
- service_notification_period 71
- service_notifications_enabled 681
- service_notifications_options 681
- \$\$SERVICEOUTPUT\$ 193, 626, 628
- \$\$SERVICEPERFDATA\$ 193, 628
- service_perfdata_command 410, 449, 602
 - dependent on the Nagios interface 443
 - independency of the Nagios interface 445
- service_perfdata_file 603
- service_perfdata_file_mode 453, 603
- service_perfdata_file_processing_command 418, 453, 603
- service_perfdata_file_processing_interval 453, 603
- service_perfdata_file_template 453, 603
- service-perfdata-pnp (command) 448
- service_reaper_frequency 604, 666, 693
- services
 - availability statistics *see* avail.cgi
 - defining dependences *see* servicedependency (object)
 - defining NRPE in /etc/~ 216
 - detailed information on individual 339
 - excluding from notification 270, 681
 - grouping *see* service group (object)
 - including in status calculation (NagVis) 390, 394
 - including status calculation (NagVis) 399
 - listing in Windows 484
 - monitor all of a user 79
 - overview of all 87
 - overview of defective 87
 - overview of faulty 86
 - password definitions in 79
 - recommended configuration file 56
 - test commands *see* service check
 - test interval 68
 - to be monitored *see* service (object)
 - volatile *see* volatile services
 - Windows *see* Windows services
- \$\$SERVICESTATE\$ 628
- SERVICESTATE (NSClient/NC_Net command) 478
- \$\$SERVICESTATEID:*\$ 190
- \$\$SERVICESTATEID\$ 628
- \$\$SERVICESTATETYPE\$ 628
- shell script
 - as a plugin 27
 - developing plugins in the form of 660, 662

- shell scripting *see* bash programming
- \$SHORTDATETIME\$ 78
- show_context_help 78
- showlog.cgi 329, 356
- signal handler, in plugins 571
- single sign-on 637–652
- size
 - of a file monitoring *see* check_file_age
 - monitoring for a directory (Windows) 496
 - monitoring for a file (Windows) 467, 496
- sleep_time 604
- slurpd, monitoring 164
- SMBus 185
- smoke alarm 506
- SMS
 - delivery address *see* pager
 - as a notification medium 278–282
 - notification program 278
- smsclient 278–282
 - installation 279–280
- smssend 278
- SMTP 26, 103–104, 113–115
 - test of mail server restrictions 115
 - testing 101
- SNMP 227–264
 - authentication *see* authentication
 - converting OIDs to legible text *see* SNMPPTT
 - defining protocol version for check_snmp 248
 - generic Nagios plugin *see* check_snmp
 - and precision *see* rounding up
 - Nagios plugins 246–264
 - querying OIDs 235–237
 - RFCs 229, 231, 233–234, 238
 - and service dependencies 289
 - testing several network interfaces simultaneously 252
 - in Windows 462
- SNMP management systems, in comparison to Nagios 312
- SNMP traps 228
 - processing 292
 - processing with Nagios 312–316
- snmpd 238–246
 - configuration *see* snmpd.conf
 - traps sent by default 313
- snmpd.conf 240–246, 313
- snmpget 235
 - as a utility for check_snmp 247
- snmpgetnext 235
- snmptrapd 312–313, 532, 546
- snmptrapd.conf 312
 - integrating SNMPPTT 546
- SNMP traps 532
- SNMPPTT 532, 534, 546–549
 - Web front end 532
- snmpptt.ini 547–548
- SNMPv1 233
 - as security model in the snmpd configuration 240
- SNMPv2c 233
 - as security model in the snmpd configuration 240
- SNMPv3 233
 - security model in the snmpd configuration 240
- snmpwalk 235–236, 239
- socket_name (ndo2db parameters) 385
- socket_type (ndo2db parameters) 385
- soft recovery 97
- soft state 63, 68, 92, 96, 267
 - accounting for, in frequency statistics 354
 - after RECOVERY 354
 - ignoring in NagVis 391, 394, 399
 - macro 628
- source code, download 39
- Splunk 609
 - splunk_url 609
- SPNEGO 639, 640
- spreading 84
- sqlplus (Oracle) 576–577
- Squid
 - cache manager 125, 126
 - configuring to use check_squid 126
 - monitoring 123–127
- SSH
 - compatibility problems in heterogeneous environments 205
 - generating key pairs 208
 - monitoring *see* check_ssh
 - running plugins through 102, 205–211, 488
 - using in event handler scripts 622
- SSL
 - capabilities, Web server testing 101
 - check_pop, check_imap 117
 - SSL connection, Web server testing 123
 - via STARTTLS *see* STARTTLS
 - using for the test (check_tcp) 134
- SSO *see* single sign-on
- standard macros 627–632

- start script 84
 - STARTTLS 117
 - and check_tcp 134
 - testing, in POP And IMAP connections 117
 - STARTTLS (check_smtp) 114
 - state, confirm *see* acknowledgement
 - state flapping *see* flapping
 - state macros 686
 - state type 621
 - state_retention_file 367, 604
 - states
 - hard and soft 92
 - of hosts and services 96–98
 - statistical macros 631
 - statistics, availability of hosts and services *see* avail.cgi
 - status, oscillating *see* flapping
 - status display, in the Web interface *see* status.cgi
 - status flags, monitoring processes with specific 165
 - status macros 621
 - status values
 - of host checks 190
 - of service checks 190
 - status.cgi 328, 334–338, 615, 692
 - Nuvola style 368
 - output style 334
 - status.dat 591
 - status_file 604
 - statusmap.cgi 328, 346–348
 - user defined map layout 365
 - using individual icons 365
 - statusmap_background_image 609
 - statusmap_image 365
 - status_update_interval 604
 - statuswml.cgi 328, 350
 - statuswrl.cgi 328, 348–350, 365, 608
 - statuswrl_include 610
 - step (NagiosGrapher) 432
 - stop light states 26
 - storage space *see* hard drive capacity
 - stratum 154
 - style, Nuvola *see* Nuvola
 - sudo 622
 - summary.cgi 329, 357–358
 - summary macros 667
 - SuSE
 - NET-SNMP 234
 - NRPE installation 214
 - smsclient installation 279
 - swap area, usage in Unix vs. Windows 476
 - swap partition, testing 206
 - swap space
 - in the Host Resources MIB 238
 - monitoring with SNMP 259–262
 - testing 102, 162
 - in the UCD-SNMP-MIB 239
 - switched-off computer *see* DOWN (state)
 - switches, monitoring 227
 - symlinks, for the start script 84
 - syslog
 - integrating into Nagios 306–312
 - logging of NSCA 302
 - logging Windows events in 545–546
 - sending events to database 536, 538
 - syslog-ng *see* syslog
 - documentation 307
 - syslog-ng.conf 307
 - system information, storing in SNMP 242
 - system load *see* CPU load
 - system start 43, 84
 - system time
 - checking with NTP *see* check_ntp
 - checking with the time protocol *see* check_time
 - monitoring 177–179
 - SysTray.dll 467
 - Systray icon, for NSClient+ 467
- T
- tac.cgi 329, 345–346, 615
 - TCP wrapper, using with NRPE 217, 220
 - tcp_port (ndomod parameters) 384
 - telephone number, for SMS *see* pager
 - temperature
 - monitoring 505–509
 - testing via SNMP 250
 - temp_file 604, 693
 - templates 75–76, 684
 - for distributed monitoring 321–324
 - for drraw 426
 - for hosts 471
 - for PNP 454–456
 - for processing performance data 405–407
 - self-defined variables 471
 - to retrieve SAP monitoring data 523–525
 - temp_path 604, 693
 - test
 - NSClient+- module 467
 - of Perl plugins 674–675

- of the NSCA 306
 - test plugin *see* `check_dummy`
 - test repeat, defining number *see* `max_check_attempts`
 - tests, postponing 342
 - threshold 557, 572
 - critical (`check_dig`) 128
 - critical (`check_disk`) 158
 - critical (`check_eventdb.pl`) 543
 - critical (`check_ntp_peer`) 155, 156
 - critical (`check_pcmeasure`) 508
 - negating 558
 - parsing details of 570–571
 - value, critical (`check_ntp_peer`) 156
 - \$TIME\$ 630
 - time, system *see* system time
 - time axis, of states that have occurred *see* `trends.cgi`
 - time details 62
 - time macros 630
 - time object *see* `timeperiod` (object)
 - time period
 - defining 74–75
 - defining for display (PNP) 451
 - for messages 270
 - for monitoring *see* `check_period`
 - for notification 60, 64, 70–71, 273
 - time protocol
 - for monitoring system time *see* `check_time`
 - time unit 62
 - timeout
 - implementing 571–572
 - plugin 106, 108, 558–559
 - return value 555
 - `timeperiod` (object) 60, 64, 74–75
 - changes in Nagios 3.x 682
 - `timeperiods.cfg` 74
 - \$TIMET\$ 630
 - time zone, defining 692
 - TLS *see* SSL
 - `tmppath` (NagiosGrapher) 433
 - Token Ring, vs. CSMA/CD (Ethernet) 232
 - topology *see* network topology
 - \$TOTALHOSTSDOWN\$ 631
 - \$TOTALHOSTSUNREACHABLE\$ 631
 - \$TOTALHOSTSUP\$ 631
 - \$TOTALSERVICEPROBLEMS\$ 631
 - \$TOTALSERVICESCRITICAL\$ 631
 - \$TOTALSERVICESOK\$ 631
 - \$TOTALSERVICESUNKNOWN\$ 631
 - \$TOTALSERVICESWARNING\$ 631
 - traffic *see* network traffic
 - traffic light states 67
 - `translate_passive_host_checks` 604, 690
 - traps *see* SNMP traps
 - `trends.cgi` 329, 358–359
- U
- UCD-SNMP-MIB 238
 - UCD-SNMP 234
 - UDP services, monitoring *see* `check_udp`
 - `udpecho` 444
 - uninterruptible power supply *see* UPS
 - Unix socket, as NDOUtils interface 378
 - UNKNOWN (state) 27, 96, 106, 555
 - color in the Web interface 351
 - as a display criterion for `status.cgi` 337
 - displaying in NagVis 389
 - displaying in the Web interface 346
 - force/suppress notification 269
 - macro 278
 - return value 188, 555
 - UNREACHABLE (state) 27, 64, 65, 94, 269
 - as display criterion for `status.cgi` 336
 - macro 277
 - return value 555
 - UP (state) 94, 96
 - as a display criterion for `status.cgi` 336–337
 - macro 277
 - upgrade, to Nagios 3.0 693–694
 - UPS 149
 - check load 182
 - checking load status 182
 - monitoring 149–154, 182–183, 531
 - SNMP capability 227
 - `upsd` 150
 - `upsmon` 150
 - uptime 162
 - checking for Windows computers 467
 - checking for Windows hosts 499
 - testing for Windows computers 477
 - testing for Windows hosts 494, 495
 - UPTIME (NSClient/NC_Net command) 477
 - URL, adding to Nagios Web page 61
 - `url` (NagiosGrapher) 433
 - `url_html_path` 78, 610
 - `urlize` 189
 - for Windows 491
 - `use_retained_scheduling_info` 606
 - `use_aggressive_host_checking` 555, 605

- use_authentication (Nagios) 78, 606
 - use_authentication (NagiosGrapher) 436
 - USEDISKSPACE (NSClient/NC_Net command) 476–477
 - usedglibs (NagVis parameters) 392
 - use_embedded_perl_implicitly 605, 673, 688
 - use_large_installation_tweaks 605, 667
 - use_pending_states 610
 - users
 - creating 209
 - logged in, monitoring number of 177
 - NagiosGrapher 432
 - user account, creating *see* creating user
 - user permissions, changing on file *see* chmod
 - useradd 209
 - use_regexp_matching 605
 - use_retained_program_state 605
 - USERx\$ macros 601, 625, 631
 - \$USER1\$ 625
 - use_syslog 606
 - use_timezone 606, 692
 - use_true_regexp_matching 606
 - USV, monitoring 666
- V
- VALUES (log entry) 446
 - variables
 - for NagiosGrapher 444
 - macros as environment 592, 631
 - self-defined 471, 685–686
 - switching off environment 449, 686
 - as a performance brake 667
 - user-defined 626, 633–635
 - volatile services 167, 309–310
 - voltage detector 506
 - VRML display, monitored computer *see* statuswrl.cgi
 - VRML-capable browser 348
 - vrm_image 365
 - VRRP 260
- W
- WAP
 - access to Nagios *see* statuswml.cgi
 - Nagios via 350
 - WARNING (state) 26, 27, 96, 105, 555
 - as a display criterion for status.cgi 337
 - displaying in NagVis 389
 - force/suppress notification 269
 - macro 278
 - marking in the Web interface 87
 - resetting manually *see* error states
 - return value 188
 - warning limit
 - check_apc 182–183
 - check_by_ssh 207
 - check_dig 128, 130
 - check_disk 158
 - check_file_age 181
 - check_http 120
 - check_icmp 109
 - check_iftraffic 258
 - check_ldap 144
 - check_load 163
 - check_mailq 180
 - check_nt 472
 - check_ntp 178
 - check_pgsql 139
 - check_procs 164
 - check_smtp 114
 - check_snmp 247, 251
 - check_snmp in lm-sensors query 250
 - check_snmp_load 263
 - check_squid 127
 - check_swap 162
 - check_tcp 116, 133
 - check_time 179
 - check_ups 152
 - check_users 177
 - CPULOAD 475
 - in performance data 179
 - in plugin output 107
 - for slow network connections 106
 - specifying 108
 - warning threshold
 - check_disk 158
 - check_eventdb.pl 543
 - check_ntp_peer 155, 156
 - check_pcmeasure 508
 - water alarm 506
 - Web front end *see* Web interface
 - Web interface 28, 85–88, 327–368, 375–387
 - adding NagVis maps 401
 - adding PNP 452
 - configuration 47–51
 - context-dependent help 78
 - displaying host groups 59
 - general overview 85, 329
 - granting a user access to everything 79

- of Nagios 3.0 692
 - overview of all hosts and services 87
 - overview of defective services 87
 - overview of faulty services 86
 - for PNP 449
 - representation of flapping services 615–616
 - representing service groups 60
 - search options 87
 - showing a single host 87
 - showing virtual hosts as links 120
 - single sign-on 637–652
 - starting 48
 - switching authentication on/off 78
 - welcome screen 85
- Web proxy, monitoring *see* Squid
- Web server
- specifying user and password for the test 121
 - testing *see* HTTP
 - testing the lifespan of a certificate 123
- Web users, determining 393
- weekdays, restricting actions 74
- Windows
- event log 461
 - listing processes 484
 - listing services 484
 - monitoring 461–504
 - monitoring processes 500
 - NRPE *see* NRPE_NT, 488
 - Performance Counter *see* Performance Counter
 - querying event log 485–486
 - querying WMI database 487
 - server, monitoring 101
 - services, monitoring 478
 - SNMP 260, 462
- Windows events
- monitoring 532
 - sending to Syslog 545–546
- WMI 463
- WMI database, querying 467, 487
- WMICOUNTER (NC_Net command) 488
- WMIQUERY (NC_Net command) 487
- WML *see* statuswml.cgi
- worker, in NagVis 389
- WUI (NagVis) 391, 396–400
- settings 394
- X**
- xinetd
- configuration for NRPE 216
 - configuration for NSCA 303
- Y**
- yaps 278
- yellow (state) 26
- Z**
- zombies, checking system for 165
- zoom (NagiosGrapher) 440