İçindekiler

Ön Söz

Bu belge temel olarak Nagios monitoring sisteminin CentOS işletim sistemine kurulumunu ele almaktadır.

Belge mümkün olduğu kadar kısa ve basit tutulmuş ve en temel şekli ile Nagios kurulumunu ve kullanımını örnekler ile incelemeniz için gerekli rehberliği yapacak şekilde hazırlanmıştır. Belgenin yeni sürümlerine http://www.cehturkiye.com adresinden ulaşabilirsiniz.

Belge **Ozan UÇAR** tarafından yazılmıştır ve yazarın ismine sadık kalmak kaydı ile belge izin alınmaksızın her şekilde paylaşılabilir ve dağıtılabilir.

Nagios ile Alt Yapı Yönetimi

Nagios ile Neler Yapabilirsiniz ?

Nagios kullanarak yapabilecekleriniz;

Tüm altyapı ve iş süreçlerini izleyebilirsiniz.

Altyapı değişikliği için önceki sistemlerin başarısızlıklarını gözlemleyebilirsiniz.

Tepit edilen problemleri otomotik olarak çözebilirsiniz.

Kuruluşunuzun altyapısındaki kesintileri minimuma indirebilirsiniz.

Raporlama ve istatistiksel bilgiler toplayabilirsiniz.

Nagios Kurulumu

Bu yazıda anlatılan işlemler CentOS işletim sistemini kapsamaktadır. Kullandığınız diğer linux dağıtımı için ayarlar farklılık gösterir.

Kurulum öncesi hazırlık

```
# yum -y install httpd gcc gd gd-devel

# chkconfig --level 2345 httpd on
```

Kurulum

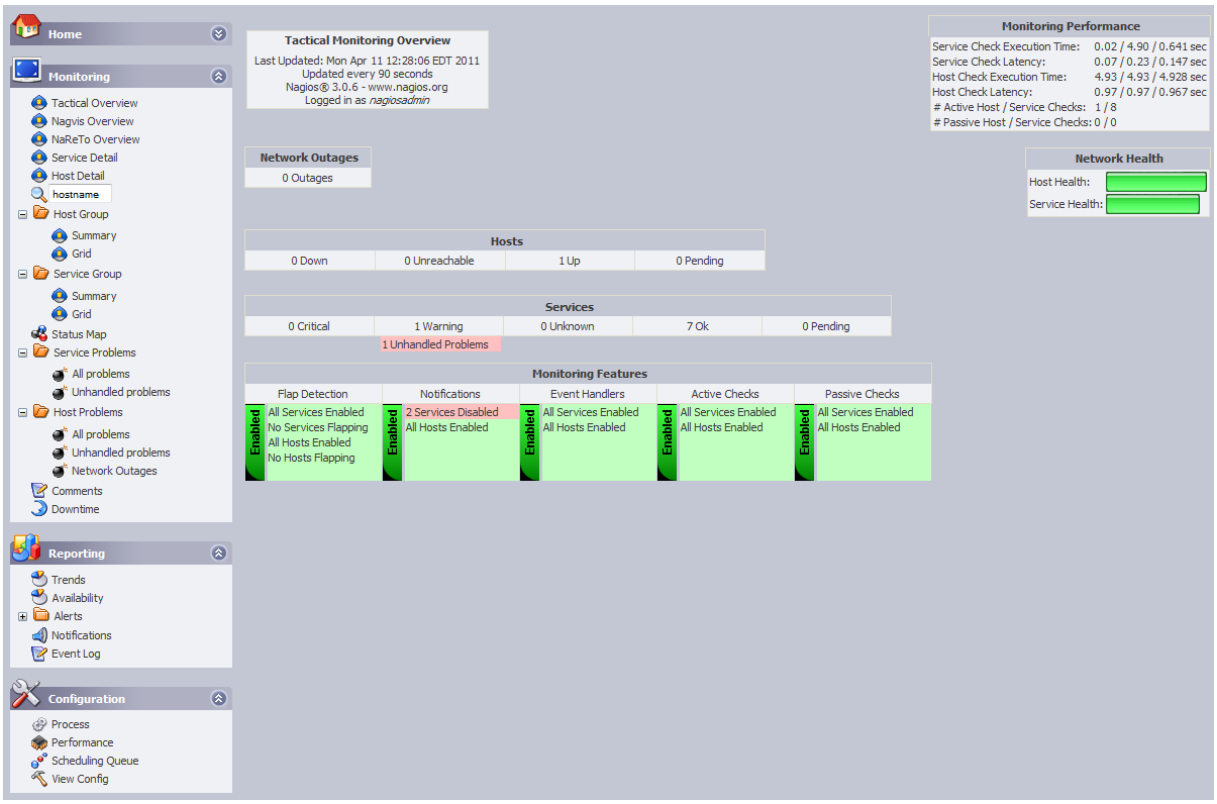
```
# yum install nagios

# yum install nagios-plugins
```

```
Nagiosadmin kullanıcının parolasını sıfırlamak için;

# htpasswd -c /etc/nagios/htpasswd.users nagiosadmin
```

Nagios Başlatılması

```
# service nagios start
```

Kurulum sonrası ekran görüntüsü



Yeni Host Grubu,Host ve Servis Ekleme

Nagios'a ait tüm ayarlar dosyaları **/etc/nagios** dizininde bulunur. **/etc/nagios/objects/** dizini altında

cehturkıyenetworks.cfg dosyası oluşturup hostları, kontrol edilecek servisleri bu dosyada tutabiliriz.

Örnek Host ve Servis (http,ssh,ping) Tanımları;

```
###############################################################################
###############################################################################
#
# HOST DEFINITION
#
###############################################################################
###############################################################################

# Define a host for the local machine

define host{
        use                     CEHTURKIYE-servers
server host template definition.
        host_name               AGRI
        alias                   CEHTURKIYE NETWORKs
        address                 99.9.88.17
        }
```

```
define host{
        use                     CEHTURKIYE-servers

server host template definition.
        host_name               ADANA
        alias                   CEHTURKIYE NETWORKs
        address                 95.11.44.43


###############################################################################
###############################################################################
# HOST GROUP DEFINITION
#
###############################################################################
###############################################################################

# Define an optional hostgroup for Linux machines

define hostgroup{
        hostgroup_name  CEHTURKIYE-servers ; The name of the hostgroup
        alias           CEHTURKIYE Cehturkıye Networks ; Long name of the group
        members         *     ; Comma separated list of hosts that belong to this
group
        }



###############################################################################
###############################################################################
#
# SERVICE DEFINITIONS
#
###############################################################################
###############################################################################


# Define a service to "ping" the local machine

define service{
        use                             CEHTURKIYE-services         ; Name of
service template to use
        hostgroup_name                  CEHTURKIYE-servers
        service_description             PING
        check_command                   check_ping!100.0,20%!500.0,60%
        }


# check that ssh services are running
define service {
        hostgroup_name                  CEHTURKIYE-servers
        service_description             SSH
        check_command                   check_ssh!-p2222
        use                             CEHTURKIYE-services
        notification_interval           0 ; set > 0 if you want to be renotified
}


# Define a service to check HTTP on the local machine.
# Disable notifications for this service by default, as not all users may have HTTP
enabled.

define service{
```

```
        use                             CEHTURKIYE-services         ; Name of
service template to use
        hostgroup_name                  CEHTURKIYE-servers
        service_description             HTTP
        check_command                   check_http!9390
        notifications_enabled           0
        }
```

Template Oluşturmak

Hostlar ve servisleri hangi aralıkla kontrol edilecek, bu bilgiler /etc/nagios/objects/templates.cfg dosyasında tutulur. Bu dosyayı kendimize göre düzenleyebiliriz.

Örneğimizdeki templates.cfg dosyası;

```
# cat templates.cfg

###############################################################################
###############################################################################
#
# CONTACT TEMPLATES
#
###############################################################################
###############################################################################

# Generic contact definition template - This is NOT a real contact, just a
template!

define contact{
        name                            generic-contact         ; The name of this
contact template
        service_notification_period     24x7                    ; service
notifications can be sent anytime
        host_notification_period        24x7                    ; host
notifications can be sent anytime
        service_notification_options    w,u,c,r,f,s             ; send
notifications for all service states, flapping events, a                      nd
scheduled downtime events
        host_notification_options       d,u,r,f,s               ; send
notifications for all host states, flapping events, and
scheduled downtime events
        service_notification_commands   notify-service-by-email ; send service
notifications via email
        host_notification_commands      notify-host-by-email    ; send host
notifications via email
        register                        0                       ; DONT REGISTER
THIS DEFINITION - ITS NOT A REAL CONTACT, JUST                        A TEMPLATE!
        }

###############################################################################
###############################################################################
#
# HOST TEMPLATES
#
###############################################################################
###############################################################################

# Generic host definition template - This is NOT a real host, just a template!

define host{
        name                            CEHTURKIYE-hosts    ; The name of this host
template
        notifications_enabled           1               ; Host notifications are
enabled
```

```
        event_handler_enabled           1               ; Host event handler is
enabled
        flap_detection_enabled          1               ; Flap detection is enabled
        failure_prediction_enabled      1               ; Failure prediction is
enabled
        process_perf_data               1               ; Process performance data
        retain_status_information       1               ; Retain status information
across program restarts
        retain_nonstatus_information    1               ; Retain non-status
information across program restarts
        notification_period             24x7            ; Send host notifications
at any time
        register                        0               ; DONT REGISTER THIS
DEFINITION - ITS NOT A REAL HOST, JUST A TEMPLATE!
        }


# Linux host definition template - This is NOT a real host, just a template!

define host{
        name                            CEHTURKIYE-servers  ; The name of this host
template
        use                             CEHTURKIYE-hosts    ; This template
inherits other values from the generic-host template
        check_period                    24x7            ; By default, Linux hosts
are checked round the clock
        check_interval                  5               ; Actively check the host
every 5 minutes
        retry_interval                  1               ; Schedule host check
retries at 1 minute intervals
        max_check_attempts              100             ; Check each Linux host 10
times (max)
        check_command                   check-host-alive ; Default command to check
Linux hosts
        notification_period             workhours       ; Linux admins hate to be
woken up, so we only notify during the day
                                                        ; Note that the
notification_period variable is being overridden from
                                                        ; the value that is
inherited from the generic-host template!
        notification_interval           120             ; Resend notifications
every 2 hours
        notification_options            d,u,r           ; Only send notifications
for specific host states
        contact_groups                  admins          ; Notifications get sent to
the admins by default
        register                        0               ; DONT REGISTER THIS
DEFINITION - ITS NOT A REAL HOST, JUST A TEMPLATE!
        }



###############################################################################
###############################################################################
#
# SERVICE TEMPLATES
#
###############################################################################
###############################################################################

# Generic service definition template - This is NOT a real service, just a
template!

define service{
        name                            CEHTURKIYE-services         ; The 'name' of
this service template
```

```
        active_checks_enabled           1                       ; Active service
checks are enabled
        passive_checks_enabled          1                       ; Passive service
checks are enabled/accepted
        parallelize_check               1                       ; Active service
checks should be parallelized (disabling this                       can lead to
major performance problems)
        obsess_over_service             1                       ; We should obsess
over this service (if necessary)
        check_freshness                 0                       ; Default is to NOT
check service 'freshness'
        notifications_enabled           1                       ; Service
notifications are enabled
        event_handler_enabled           1                       ; Service event
handler is enabled
        flap_detection_enabled          1                       ; Flap detection is
enabled
        failure_prediction_enabled      1                       ; Failure
prediction is enabled
        process_perf_data               1                       ; Process
performance data
        retain_status_information       1                       ; Retain status
information across program restarts
        retain_nonstatus_information    1                       ; Retain non-status
information across program restarts
        is_volatile                     0                       ; The service is
not volatile
        check_period                    24x7                    ; The service can
be checked at any time of the day
        max_check_attempts              100                     ; Re-check the
service up to 3 times in order to determine its                       final (hard)
state
        normal_check_interval           10                      ; Check the service
every 10 minutes under normal conditions
        retry_check_interval            2                       ; Re-check the
service every two minutes until a hard state can                       be
determined
        contact_groups                  admins                  ; Notifications get
sent out to everyone in the 'admins' group
        notification_options            w,u,c,r                 ; Send
notifications about warning, unknown, critical, and reco                      very
events
        notification_interval           60                      ; Re-notify about
service problems every hour
        notification_period             24x7                    ; Notifications can
be sent out at any time
         register                        0                      ; DONT REGISTER
THIS DEFINITION - ITS NOT A REAL SERVICE, JUST                       A TEMPLATE!
        }


# Local service definition template - This is NOT a real service, just a template!

define service{
        name                            local-service           ; The name of this
service template
        use                             CEHTURKIYE-services         ; Inherit
default values from the generic-service definition
        max_check_attempts              100                     ; Re-check the
service up to 4 times in order to determine its                       final (hard)
state
        normal_check_interval           5                       ; Check the service
every 5 minutes under normal conditions
        retry_check_interval            1                       ; Re-check the
service every minute until a hard state can be d                       etermined
        register                        0                       ; DONT REGISTER
THIS DEFINITION - ITS NOT A REAL SERVICE, JUST                       A TEMPLATE!
        }
```

Host ve servis tanımlarımız (cehturkıyenetworks.cfg) ile bu sistemleri kontrol edeceğimiz template (templates.cf) bilgilerimiz hazır. Artık nagios'a bu işlemler yapması için gerekli ayarı yapmak kalıyor.

/etc/nagios/nagios.cfg dosyasında aşağıdaki gibi ekleme yapılır;

cfg_file=/etc/nagios/objects/cehturkıyenetworks.cfg

Herşey yolunda mı ? Son kontrol;

 # nagios -v /etc/nagios/nagios.cfg

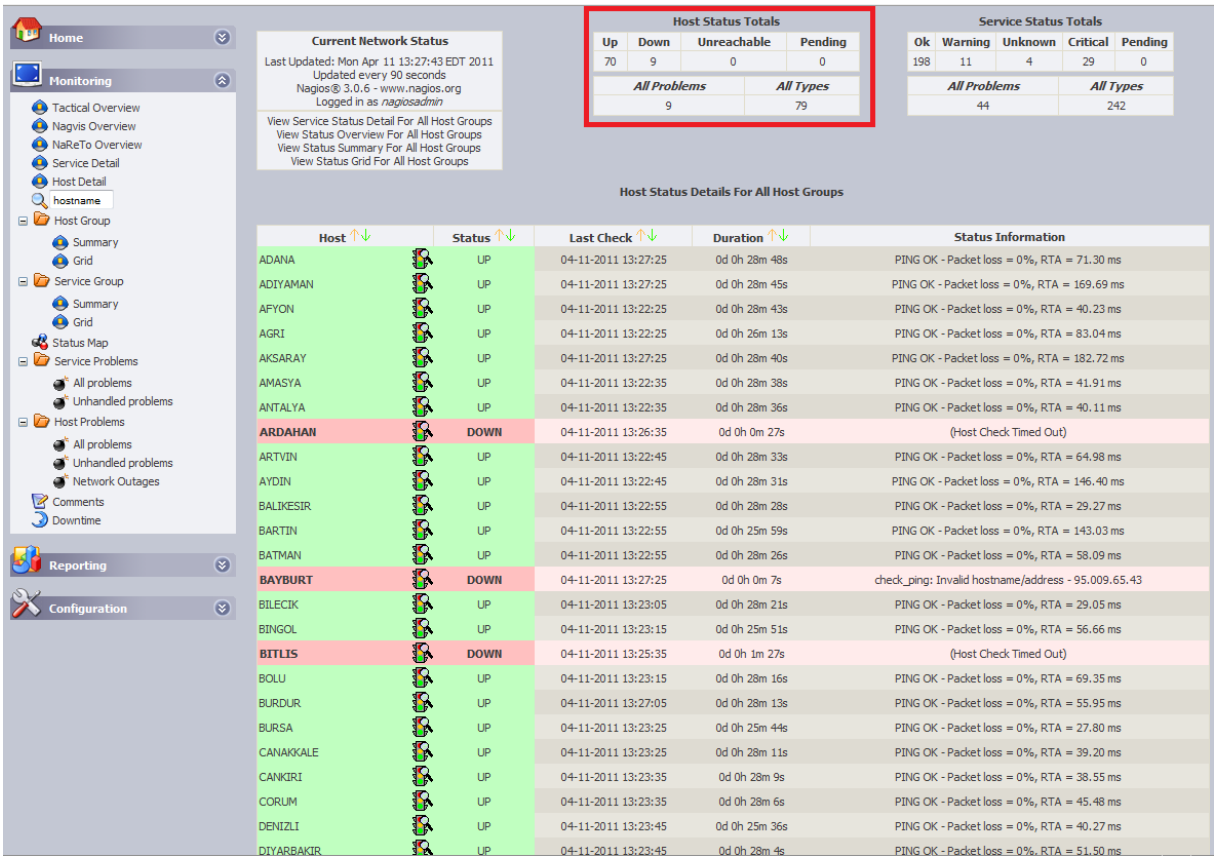
```
...
...
...


Total Warnings: 0

Total Errors:   0


Things look okay - No serious problems were detected during the pre-flight
check
```

Nagios servisini yeniden başlatıp, hostları izlemeye başlayabiliriz.

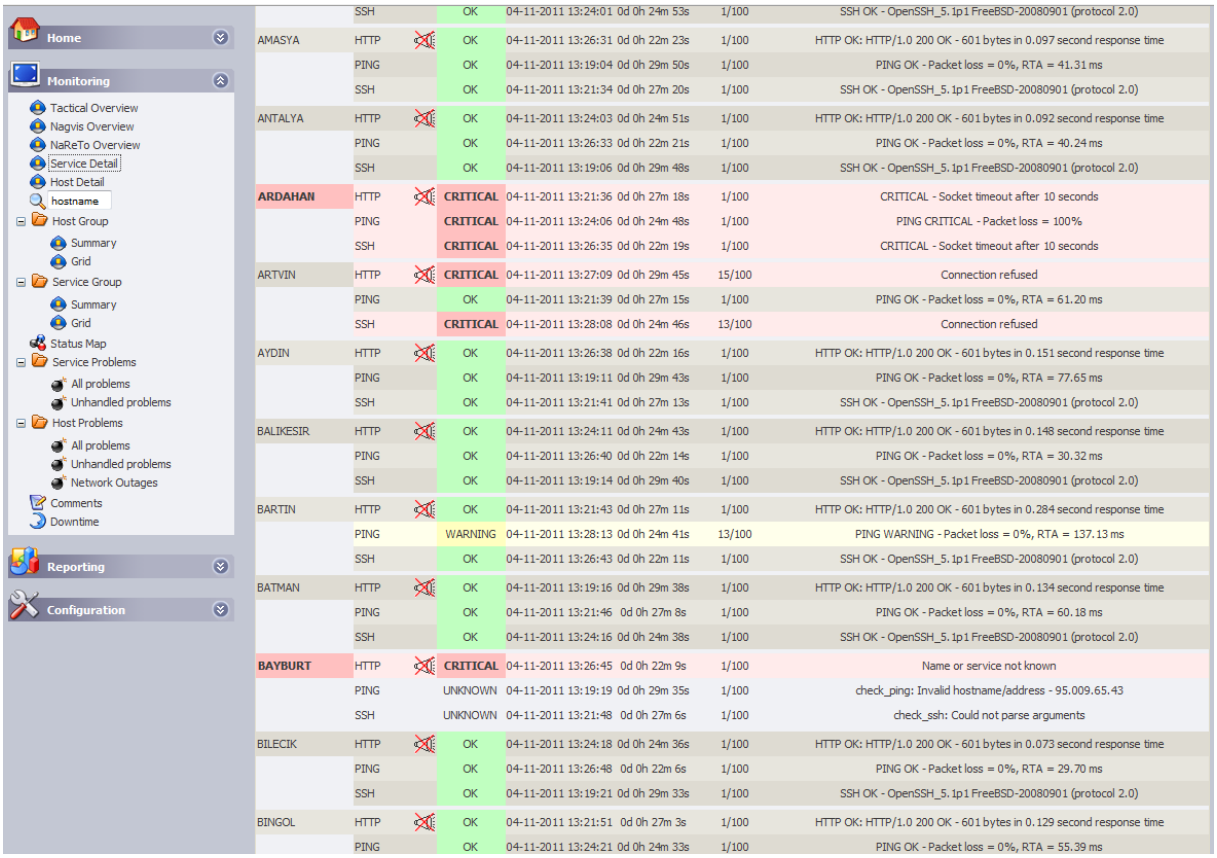
 # service nagios restart

Hostlara ait ekran görüntüsü

Host detayları



Servis Durumları



	SSH	OK	04-11-2011 13:24:01 0d 0h 24m 53s	1/100	SSH OK - OpenSSH_5.1p1 FreeBSD-20080901 (protocol 2.0)
AMASYA	HTTP	OK	04-11-2011 13:26:31 0d 0h 22m 23s	1/100	HTTP OK: HTTP/1.0 200 OK - 601 bytes in 0.097 second response time
	PING	OK	04-11-2011 13:19:04 0d 0h 29m 50s	1/100	PING OK - Packet loss = 0%, RTA = 41.31 ms
	SSH	OK	04-11-2011 13:21:34 0d 0h 27m 20s	1/100	SSH OK - OpenSSH_5.1p1 FreeBSD-20080901 (protocol 2.0)
ANTALYA	HTTP	OK	04-11-2011 13:24:03 0d 0h 24m 51s	1/100	HTTP OK: HTTP/1.0 200 OK - 601 bytes in 0.092 second response time
	PING	OK	04-11-2011 13:26:33 0d 0h 22m 21s	1/100	PING OK - Packet loss = 0%, RTA = 40.24 ms
	SSH	OK	04-11-2011 13:19:06 0d 0h 29m 48s	1/100	SSH OK - OpenSSH_5.1p1 FreeBSD-20080901 (protocol 2.0)
ARDAHAN	HTTP	CRITICAL	04-11-2011 13:21:36 0d 0h 27m 18s	1/100	CRITICAL - Socket timeout after 10 seconds
	PING	CRITICAL	04-11-2011 13:24:06 0d 0h 24m 48s	1/100	PING CRITICAL - Packet loss = 100%
	SSH	CRITICAL	04-11-2011 13:26:35 0d 0h 22m 19s	1/100	CRITICAL - Socket timeout after 10 seconds
ARTVIN	HTTP	CRITICAL	04-11-2011 13:27:09 0d 0h 29m 45s	15/100	Connection refused
	PING	OK	04-11-2011 13:21:39 0d 0h 27m 15s	1/100	PING OK - Packet loss = 0%, RTA = 61.20 ms
	SSH	CRITICAL	04-11-2011 13:28:08 0d 0h 24m 46s	13/100	Connection refused
AYDIN	HTTP	OK	04-11-2011 13:26:38 0d 0h 22m 16s	1/100	HTTP OK: HTTP/1.0 200 OK - 601 bytes in 0.151 second response time
	PING	OK	04-11-2011 13:19:11 0d 0h 29m 43s	1/100	PING OK - Packet loss = 0%, RTA = 77.65 ms
	SSH	OK	04-11-2011 13:21:41 0d 0h 27m 13s	1/100	SSH OK - OpenSSH_5.1p1 FreeBSD-20080901 (protocol 2.0)
BALIKESIR	HTTP	OK	04-11-2011 13:24:11 0d 0h 24m 43s	1/100	HTTP OK: HTTP/1.0 200 OK - 601 bytes in 0.148 second response time
	PING	OK	04-11-2011 13:26:40 0d 0h 22m 14s	1/100	PING OK - Packet loss = 0%, RTA = 30.32 ms
	SSH	OK	04-11-2011 13:19:14 0d 0h 29m 40s	1/100	SSH OK - OpenSSH_5.1p1 FreeBSD-20080901 (protocol 2.0)
BARTIN	HTTP	OK	04-11-2011 13:21:43 0d 0h 27m 11s	1/100	HTTP OK: HTTP/1.0 200 OK - 601 bytes in 0.284 second response time
	PING	WARNING	04-11-2011 13:28:13 0d 0h 24m 41s	13/100	PING WARNING - Packet loss = 0%, RTA = 137.13 ms
	SSH	OK	04-11-2011 13:26:43 0d 0h 22m 11s	1/100	SSH OK - OpenSSH_5.1p1 FreeBSD-20080901 (protocol 2.0)
BATMAN	HTTP	OK	04-11-2011 13:19:16 0d 0h 29m 38s	1/100	HTTP OK: HTTP/1.0 200 OK - 601 bytes in 0.134 second response time
	PING	OK	04-11-2011 13:21:46 0d 0h 27m 8s	1/100	PING OK - Packet loss = 0%, RTA = 60.18 ms
	SSH	OK	04-11-2011 13:24:16 0d 0h 24m 38s	1/100	SSH OK - OpenSSH_5.1p1 FreeBSD-20080901 (protocol 2.0)
BAYBURT	HTTP	CRITICAL	04-11-2011 13:26:45 0d 0h 22m 9s	1/100	Name or service not known
	PING	UNKNOWN	04-11-2011 13:19:19 0d 0h 29m 35s	1/100	check_ping: Invalid hostname/address - 95.009.65.43
	SSH	UNKNOWN	04-11-2011 13:21:48 0d 0h 27m 6s	1/100	check_ssh: Could not parse arguments
BILECIK	HTTP	OK	04-11-2011 13:24:18 0d 0h 24m 36s	1/100	HTTP OK: HTTP/1.0 200 OK - 601 bytes in 0.073 second response time
	PING	OK	04-11-2011 13:26:48 0d 0h 22m 6s	1/100	PING OK - Packet loss = 0%, RTA = 29.70 ms
	SSH	OK	04-11-2011 13:19:21 0d 0h 29m 33s	1/100	SSH OK - OpenSSH_5.1p1 FreeBSD-20080901 (protocol 2.0)
BINGOL	HTTP	OK	04-11-2011 13:21:51 0d 0h 27m 3s	1/100	HTTP OK: HTTP/1.0 200 OK - 601 bytes in 0.129 second response time
	PING	OK	04-11-2011 13:24:21 0d 0h 24m 33s	1/100	PING OK - Packet loss = 0%, RTA = 55.39 ms

Referanslar

http://nagios.org/documentation

http://www.syslogs.org/nagios-kurulumu-ve-yapilandirmasi/