Chapter 1: Searching for Problems in Nginx Configuration

Not Found

The requested URL /mirror/index.html was not found on this server.

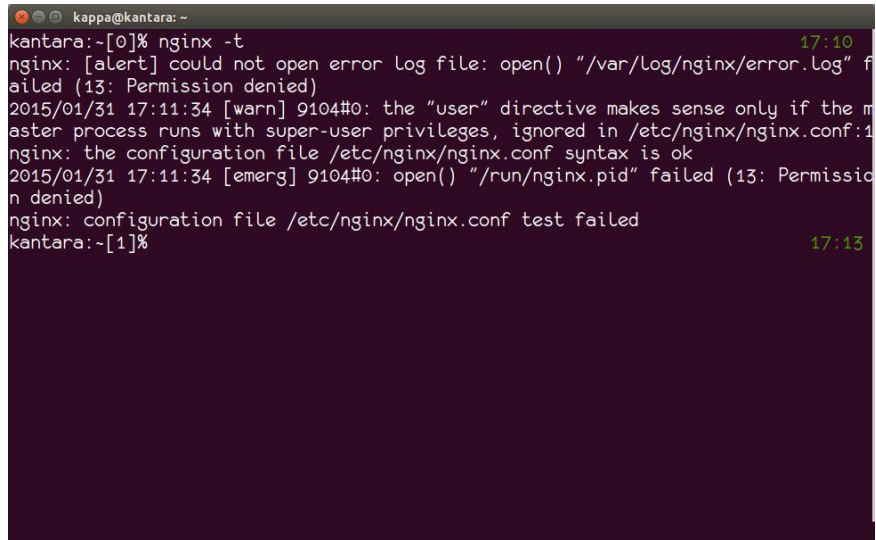Additionally, a 404 Not Found error was encountered while trying to use an ErrorDocument to handle the request.

Apache/2.2.19 (Unix) mod_ssl/2.2.19 OpenSSL/0.9.8e-fips-rhel5 DAV/2 mod_auth_passthrough/2.1 mod_bwlimited/1.4 Server at www.example.com Port 80

404 Not Found

nginx/1.6.2 (Ubuntu)

```
kantara:~[0]% nginx -t                                          17:10
nginx: [alert] could not open error log file: open() "/var/log/nginx/error.log" f
ailed (13: Permission denied)
2015/01/31 17:11:34 [warn] 9104#0: the "user" directive makes sense only if the m
aster process runs with super-user privileges, ignored in /etc/nginx/nginx.conf:1
nginx: the configuration file /etc/nginx/nginx.conf syntax is ok
2015/01/31 17:11:34 [emerg] 9104#0: open() "/run/nginx.pid" failed (13: Permissio
n denied)
nginx: configuration file /etc/nginx/nginx.conf test failed
kantara:~[1]%                                                   17:13
```

Chapter 2: Searching for Problems in Log Files

```
Mozilla Firefox

http://local.../simple-post  ×  +

http://localhost/simple-post

Nginx rules!    Submit
```

```
less nginx
/var/log/nginx/*.log {
        weekly
        missingok
        rotate 52
        compress
        delaycompress
        notifempty
        create 0640 www-data adm
        sharedscripts
        prerotate
                if [ -d /etc/logrotate.d/httpd-prerotate ]; then \
                        run-parts /etc/logrotate.d/httpd-prerotate; \
                fi \
        endscript
        postrotate
                [ -s /run/nginx.pid ] && kill -USR1 `cat /run/nginx.pid`
        endscript
}
~
~
(END)
```
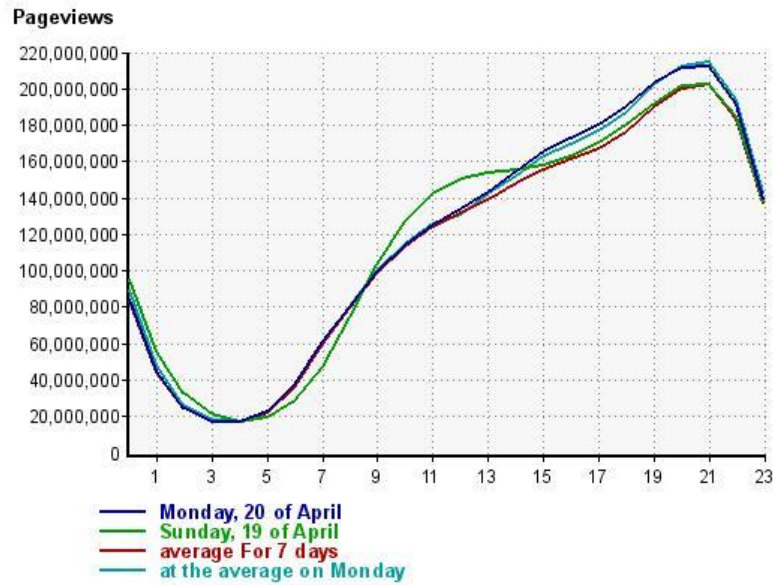
```
ssh kapranoff.ru
/var/log/weekly.log          640   5     1     $W6D0  JN
/var/log/wtmp                644   3     *     @01T05 B
/var/log/xferlog             600   7     100   *      JC

/var/log/nginx-access.log    644   *     * @T00       JC /var/run/nginx.pid
/var/log/nginx-error.log     644   *     * @T00       JC /var/run/nginx.pid
~
~
~
~
~
~
~
~
~
~
~
~
~
newsyslog.conf                                        41,28
```

Chapter 3: Troubleshooting Functionality

Pageviews

- Monday, 20 of April
- Sunday, 19 of April
- average For 7 days
- at the average on Monday

```
kappa@kantara: ~
kantara:~[2]%   13:38
kantara:~[2]% ping machine-learning1.example.com   13:38
ping: unknown host machine-learning1.example.com
kantara:~[2]%   13:38
```



```
kappa@kantara: ~
kantara:~[0]% ping t.co   13:47
PING t.co (199.16.156.11) 56(84) bytes of data.
64 bytes from 199.16.156.11: icmp_seq=1 ttl=246 time=151 ms
64 bytes from 199.16.156.11: icmp_seq=3 ttl=246 time=151 ms
64 bytes from 199.16.156.11: icmp_seq=6 ttl=246 time=151 ms
64 bytes from 199.16.156.11: icmp_seq=9 ttl=246 time=151 ms
64 bytes from 199.16.156.11: icmp_seq=11 ttl=246 time=151 ms
64 bytes from 199.16.156.11: icmp_seq=14 ttl=246 time=151 ms
64 bytes from 199.16.156.11: icmp_seq=16 ttl=246 time=151 ms
64 bytes from 199.16.156.11: icmp_seq=17 ttl=246 time=151 ms
64 bytes from 199.16.156.11: icmp_seq=19 ttl=246 time=151 ms
64 bytes from 199.16.156.11: icmp_seq=20 ttl=246 time=151 ms
64 bytes from 199.16.156.11: icmp_seq=22 ttl=246 time=151 ms
64 bytes from 199.16.156.11: icmp_seq=23 ttl=246 time=151 ms
64 bytes from 199.16.156.11: icmp_seq=24 ttl=246 time=151 ms
64 bytes from 199.16.156.11: icmp_seq=25 ttl=246 time=151 ms
^C
--- t.co ping statistics ---
26 packets transmitted, 14 received, 46% packet loss, time 34237ms
rtt min/avg/max/mdev = 151.303/151.410/151.521/0.363 ms
kantara:~[0]%   13:48
kantara:~[0]%   13:48
```
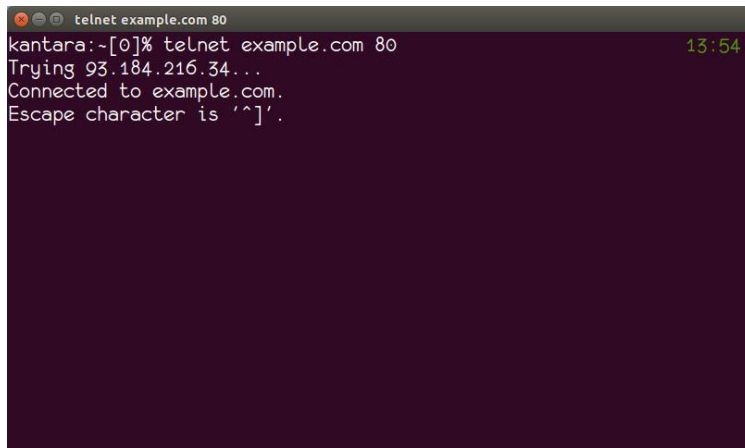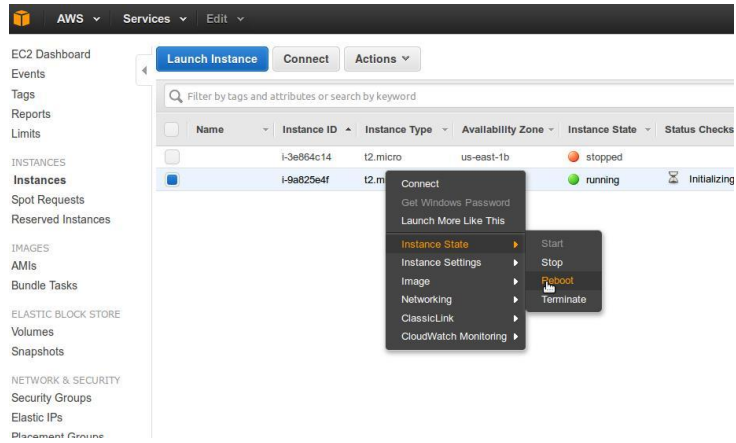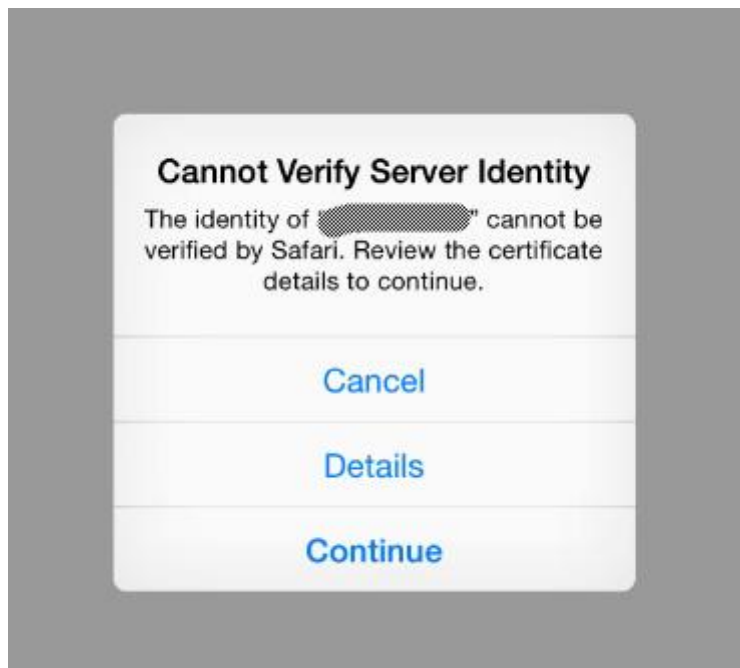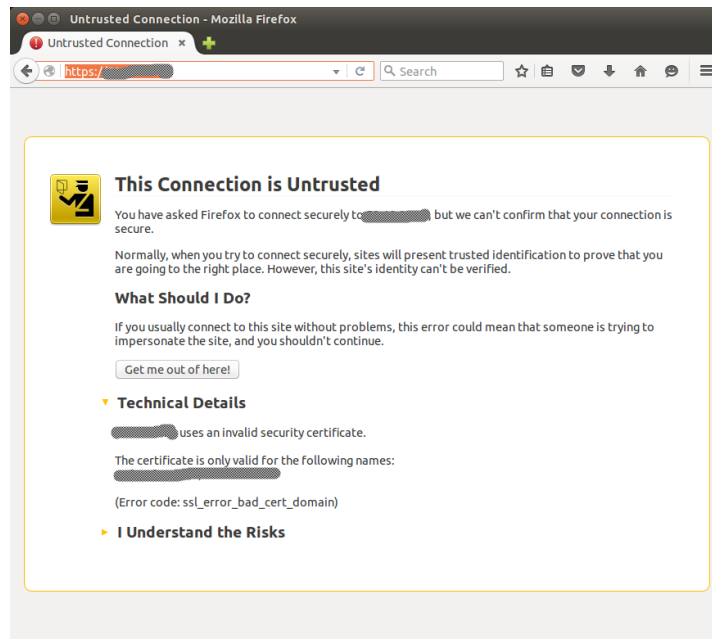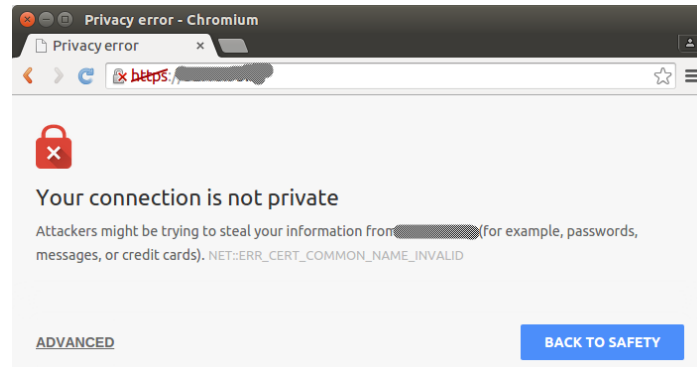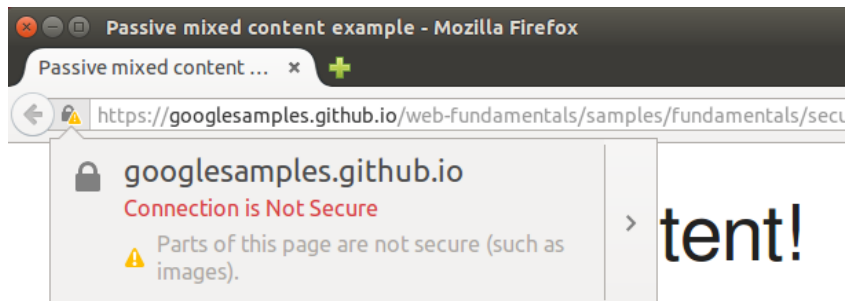
# Chapter 4: Optimizing Website Performance
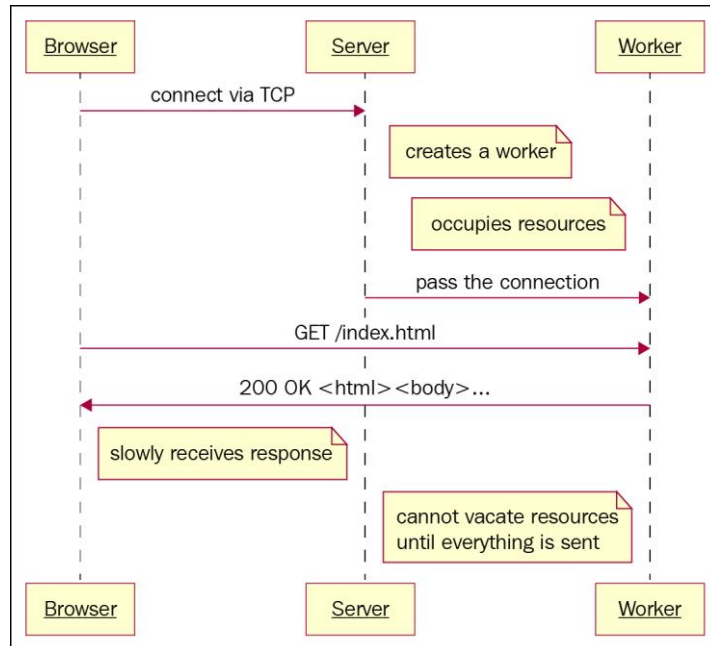


| URL | Status Codes | # Redirects |
|-----|--------------|-------------|
| http://yahoo.nl | 301 → 301 → 301 → 200 | 3 |

# Chapter 5: Troubleshooting Rare Specific Problems

**Privacy error - Chromium**

Privacy error

https:/

**Your connection is not private**

Attackers might be trying to steal your information from (for example, passwords, messages, or credit cards). NET::ERR_CERT_DATE_INVALID

Advanced

Back to safety

---

https:/

Certificate Error: Navigatio

Page ▾   Safety ▾   Tools ▾   ? ▾

**There is a problem with this website's security certificate.**

The security certificate presented by this website has expired or is not yet valid.

Security certificate problems may indicate an attempt to fool you or intercept any data you s server.

**We recommend that you close this webpage and do not continue to this website.**

Click here to close this webpage.

Continue to this website (not recommended).

More information

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**Passive mixed content example - Mozilla Firefox**

Passive mixed content ...

https://googlesamples.github.io/web-fundamentals/samples/fundamentals/sec

googlesamples.github.io

Connection is Not Secure

Parts of this page are not secure (such as images).

tent!
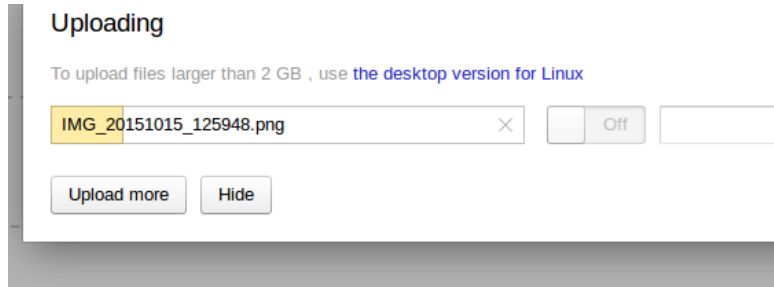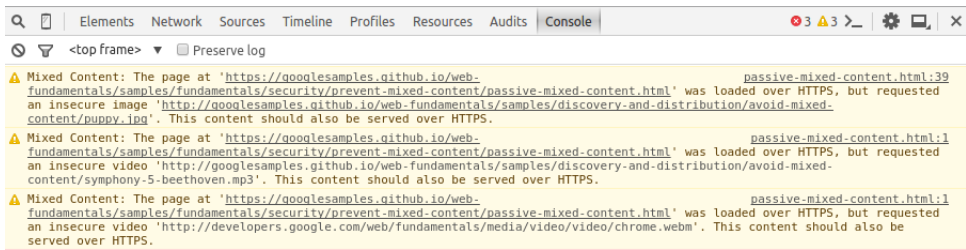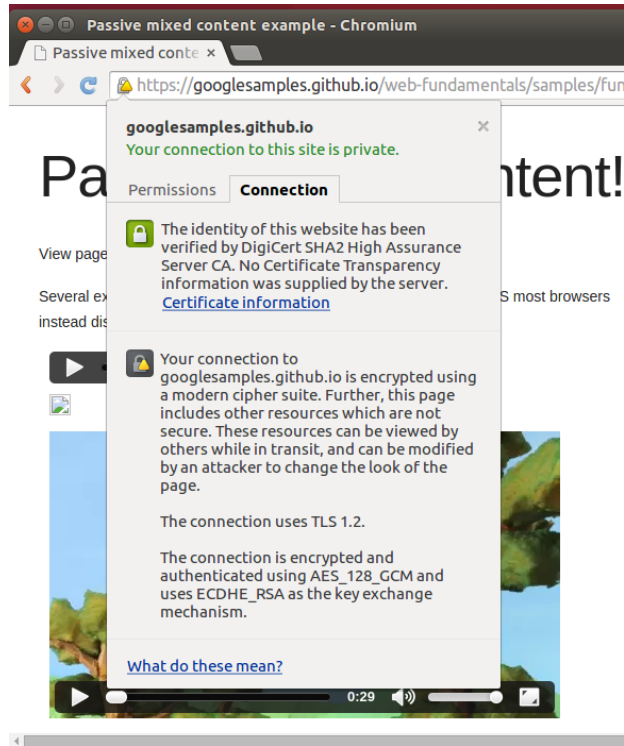
View page over: HTTP - HTTPS

Several examples of passive mixed content. When viewed over HTTPS most browsers do n

Passive mixed content example - Chromium

Passive mixed conte ×

https://googlesamples.github.io/web-fundamentals/samples/fun

**googlesamples.github.io**
Your connection to this site is private.

Permissions | **Connection**

The identity of this website has been verified by DigiCert SHA2 High Assurance Server CA. No Certificate Transparency information was supplied by the server.
Certificate information

Your connection to googlesamples.github.io is encrypted using a modern cipher suite. Further, this page includes other resources which are not secure. These resources can be viewed by others while in transit, and can be modified by an attacker to change the look of the page.

The connection uses TLS 1.2.

The connection is encrypted and authenticated using AES_128_GCM and uses ECDHE_RSA as the key exchange mechanism.

What do these mean?

Pa... ntent!

View page

Several ex... S most browsers
instead dis...

0:29

Elements  Network  Sources  Timeline  Profiles  Resources  Audits  **Console**          ❌3 ⚠3 >_      ⚙ 🖥 ✕

<top frame> ▼  ☐ Preserve log

⚠ Mixed Content: The page at 'https://googlesamples.github.io/web-                    passive-mixed-content.html:39
fundamentals/samples/fundamentals/security/prevent-mixed-content/passive-mixed-content.html' was loaded over HTTPS, but requested
an insecure image 'http://googlesamples.github.io/web-fundamentals/samples/discovery-and-distribution/avoid-mixed-
content/puppy.jpg'. This content should also be served over HTTPS.

⚠ Mixed Content: The page at 'https://googlesamples.github.io/web-                     passive-mixed-content.html:1
fundamentals/samples/fundamentals/security/prevent-mixed-content/passive-mixed-content.html' was loaded over HTTPS, but requested
an insecure video 'http://googlesamples.github.io/web-fundamentals/samples/discovery-and-distribution/avoid-mixed-
content/symphony-5-beethoven.mp3'. This content should also be served over HTTPS.

⚠ Mixed Content: The page at 'https://googlesamples.github.io/web-                     passive-mixed-content.html:1
fundamentals/samples/fundamentals/security/prevent-mixed-content/passive-mixed-content.html' was loaded over HTTPS, but requested
an insecure video 'http://developers.google.com/web/fundamentals/media/video/video/chrome.webm'. This content should also be
served over HTTPS.

## Uploading

To upload files larger than 2 GB , use the desktop version for Linux

IMG_20151015_125948.png                                    ✕        Off

Upload more     Hide

# Chapter 6: Monitoring Nginx
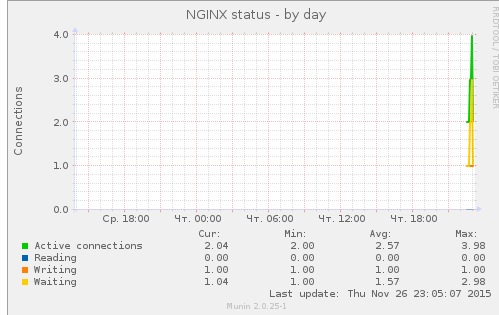
**MUNIN** Overview

**Problems**
Critical (0)
Warning (0)
Unknown (0)

**Groups**
localdomain

**Categories**
disk [ d w m y ]
munin [ d w m y ]
network [ d w m y ]
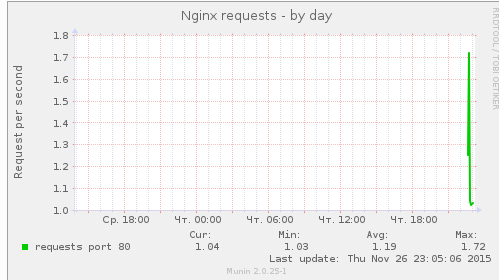nginx [ d w m y ]
processes [ d w m y ]
system [ d w m y ]

**NGINX status**
localhost.localdomain :: NGINX status

NGINX status - by day

| | Cur: | Min: | Avg: | Max: |
|---|---|---|---|---|
| Active connections | 2.04 | 2.00 | 2.57 | 3.98 |
| Reading | 0.00 | 0.00 | 0.00 | 0.00 |
| Writing | 1.00 | 1.00 | 1.00 | 1.00 |
| Waiting | 1.04 | 1.00 | 1.57 | 2.98 |

Last update: Thu Nov 26 23:05:07 2015
Munin 2.0.25-1

**Nginx requests**
localhost.localdomain :: Nginx requests

Nginx requests - by day

| | Cur: | Min: | Avg: | Max: |
|---|---|---|---|---|
| requests port 80 | 1.04 | 1.03 | 1.19 | 1.72 |

Last update: Thu Nov 26 23:05:06 2015
Munin 2.0.25-1

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Overview | Metrics | Snapshot | **Alerting** | Custom Plugins

[ + **Alert** config ] [ + **Group alert** config ]

**Device Alerts**    *Ctrl (Windows), Cmd (Mac) or Shift click to perform actions on multiple alerts*

Nginx Requests ⇅ > ⋮ 50 /s     1 action, wait 1m, no repeat    ON

Nginx Connections Dropped ⇅ > ⋮ 1 /s     1 action, wait 5m, no repeat    ON

---

**NGINX+**    Dashboard | ✓ Server zones | ✗ Upstreams | ✓ TCP Zones | ✓ TCP Upstreams | ✓ Caches | ⚙

Version **1.9.4**
Address **206.251.255.64**
PID **70469**
Uptime **5d 3h 58m**

**Connections** Accepted: 20750626

| Current | Accepted/s | Active | Idle | Dropped |
|---|---|---|---|---|
| 29 | 0 | 4 | 25 | 0 |

**Requests** Total: 46926994

| Current | Req/s |
|---|---|
| 4 | 9 |

**Server zones** ✓

| Total | Problems |
|---|---|
| 3 / | 0 |

**Traffic**
In: 0
Out: 0

**Upstreams** ✗

| Total | Alerts |
|---|---|
| 4 / | 2 |

**Servers**
All: 7 / Up: 5
Failed: 2

**TCP Zones** ✓

Conn total: 444279
Conn current: 0
Conn/s: 0

**Traffic**
In: 0
Out: 0

**TCP Upstreams** ✓

| Total | Problems |
|---|---|
| 1 / | 0 |

**Servers**
All: 4 / Up: 3
Failed: 0

**Caches** ✓

| Total | Problems |
|---|---|
| 1 / | 0 |

**Caches states**
☀ Warm: 1
❄ Cold: 0