cat /etc/redhat-release
CentOS release 5.2 (Final)

Linux host01.test.ru 2.6.18-53.1.19.el5.028stab053.14 #1 SMP Thu May 8 20:43:27 MSD 2008 i686 i686 i386 GNU/Linux

3. VPS 1100

ONBOOT="yes"

# UBC parameters (in form of barrier:limit)
KMEMSIZE="2147483647:2147483647"
LOCKEDPAGES="2147483647:2147483647"
PRIVVMPAGES="2147483647:2147483647"
SHMPAGES="2147483647:2147483647"
NUMPROC="2147483647:2147483647"
PHYSPAGES="2147483647:2147483647"
VMGUARPAGES="2147483647:2147483647"
OOMGUARPAGES="2147483647:2147483647"
NUMTCPSOCK="2147483647:2147483647"
NUMFLOCK="2147483647:2147483647"
NUMPTY="2147483647:2147483647"
NUMSIGINFO="2147483647:2147483647"
TCPSNDBUF="2147483647:2147483647"
TCPRCVBUF="2147483647:2147483647"
OTHERSOCKBUF="2147483647:2147483647"
DGRAMRCVBUF="2147483647:2147483647"
NUMOTHERSOCK="2147483647:2147483647"
DCACHESIZE="2147483647:2147483647"
NUMFILE="2147483647:2147483647"
AVNUMPROC="180:180"
NUMIPTENT="2147483647:2147483647"

# Disk quota parameters (in form of softlimit:hardlimit)
DISKSPACE="100000000:120000000"
DISKINODES="10000000:15000000"
QUOTATIME="0"

CPU fair sheduler parameter

```
CPUUNITS="500000"


IP_ADDRESS="192.168.1.10"
HOSTNAME="a.host01.test.ru"
VE_ROOT="/vz/root/$VEID"
VE_PRIVATE="/vz/private/$VEID"
OSTEMPLATE="centos-5-i386-minimal"
ORIGIN_SAMPLE="vps.basic"
NAMESERVER="192.168.1.1"
SEARCHDOMAIN="testru"
CPULIMIT="1000"
```

```
# Kernel sysctl configuration file for Red Hat Linux
#
# For binary values, 0 is disabled, 1 is enabled.  See sysctl( and
# sysctl.conf(5) for more details.

# Controls IP packet forwarding
net.ipv4.ip_forward = 0

# Controls source route verification
net.ipv4.conf.default.rp_filter = 1

# Do not accept source routing
net.ipv4.conf.default.accept_source_route = 0

# Controls the System Request debugging functionality of the kernel
kernel.sysrq = 0

# Controls whether core dumps will append the PID to the core filename
# Useful for debugging multi-threaded applications
kernel.core_uses_pid = 1

# Controls the use of TCP syncookies
net.ipv4.tcp_syncookies = 0

# Controls the maximum size of a message, in bytes
kernel.msgmnb = 65536

# Controls the default maxmimum size of a mesage queue
kernel.msgmax = 65536
```

```
# Controls the maximum shared segment size, in bytes
kernel.shmmax = 4294967295

# Controls the maximum number of shared memory segments, in pages
kernel.shmall = 268435456

# On Hardware Node we generally need
# packet forwarding enabled and proxy arp disabled
net.ipv4.ip_forward = 1
net.ipv4.conf.default.proxy_arp = 0
# Enables source route verification
net.ipv4.conf.all.rp_filter = 1
# Enables the magic-sysrq key
kernel.sysrq = 1
# TCP Explict Congestion Notification
#net.ipv4.tcp_ecn = 0
# we do not want all our interfaces to send redirects
net.ipv4.conf.default.send_redirects = 1
net.ipv4.conf.all.send_redirects = 0

# Local port range
net.ipv4.ip_local_port_range = 8192 65535

# Netfilter connection tracking table size
net.ipv4.ip_conntrack_max = 258068

# For servers that receive many connections at the same time,
# the TIME-WAIT sockets for new connections can be reused.
# This is useful in Web servers etc. See also net.ipv4.tcp_tw_recycle.
net.ipv4.tcp_tw_reuse = 1

# Enable fast recycling of TIME-WAIT sockets status
net.ipv4.tcp_tw_recycle = 1

# Tune VM subsystem to use swap only as last resort
vm.swappiness = 1

# Limit of socket listen() backlog, known in userspace as SOMAXCONN.
# Defaults to 128.  See also tcp_max_syn_backlog for additional tuning
# for TCP sockets.
net.core.somaxconn = 2048

# The maximum number of queued connection requests which have still not
# received an acknowledgement from the  connecting  client.  If this
# number is exceeded, the kernel will begin dropping requests.
# The default value of 256 is increased to 1024 when the memory present
# in the system is adequate or greater (>= 128Mb), and reduced to 128
```

```
# for  those  systems  with very low memory (<= 32Mb).  It is recommended
# that if this needs to be increased above 1024, TCP_SYNQ_HSIZE in
# include/net/tcp.h be modified to keep
# TCP_SYNQ_HSIZE*16<=tcp_max_syn_backlog,  and  the kernel be recompiled.
net.ipv4.tcp_max_syn_backlog = 1024

# Maximum number of packets in the global input queue.
# for 1 GBit links recommended value near 3000
net.core.netdev_max_backlog = 2500

# prevent time wait bucket table overflow
net.ipv4.tcp_max_tw_buckets_ub = 129034
net.ipv4.tcp_max_tw_kmem_fraction = 384

# This sets the max OS receive buffer size for all types of connections.
net.core.rmem_max = 16777216

# This sets the max OS send buffer size for all types of connections.
net.core.wmem_max = 16777216

# This sets the default OS receive buffer size for all types of connections.
net.core.rmem_default = 65535

# This sets the default OS send buffer size for all types of connections.
net.core.wmem_default = 65535

# TCP Autotuning setting. "The tcp_mem variable defines how the TCP stack
# should behave when it comes to memory usage. ... The first value specified
# in the tcp_mem variable tells the kernel the low threshold. Below this
# point, the TCP stack do not bother at all about putting any pressure on the
# memory usage by different TCP sockets. ... The second value tells the
# kernel at which point to start pressuring memory usage down. ... The final
# value tells the kernel how many memory pages it may use maximally.
# If this value is reached, TCP streams and packets start getting dropped
# until we reach a lower memory usage again. This value includes all
# TCP sockets currently in use."
net.ipv4.tcp_mem = 16777216 16777216 16777216


# TCP Autotuning setting. "The first value tells the kernel the minimum
# receive buffer for each TCP connection, and this buffer is always allocated
# to a TCP socket, even under high pressure on the system. ... The second
# value specified tells the kernel the default receive buffer allocated for
# each TCP socket. This value overrides the /proc/sys/net/core/rmem_default
# value used by other protocols. ... The third and last value specified in
# this variable specifies the maximum receive buffer that can be allocated
# for a TCP socket."
net.ipv4.tcp_rmem = 4096 131072 16777216
```

```
# TCP Autotuning setting. "This variable takes 3 different values which holds
# information on how much TCP sendbuffer memory space each TCP socket has to
# use. Every TCP socket has this much buffer space to use before the buffer
# is filled up. Each of the three values are used under different conditions.
# ... The first value in this variable tells the minimum TCP send buffer
# space available for a single TCP socket. ... The second value in the variable
# tells us the default buffer space allowed for a single TCP socket to use.
# ... The third value tells the kernel the maximum TCP send buffer space."
net.ipv4.tcp_wmem = 4096 131072 16777216

# This will enusre that immediatly subsequent connections use these values.
net.ipv4.route.flush=1

# RFC 2018 TCP Selective Acknowledgements
net.ipv4.tcp_sack = 0

# RFC 1323 TCP timestamps
net.ipv4.tcp_timestamps = 0

net.ipv4.tcp_sack = 1
net.ipv4.tcp_fack = 1


# Enable TCP behaviour conformant with RFC 1337.  When disabled,
# if a RST is received in TIME_WAIT state,  we close the socket
# immediately without waiting for the end of the TIME_WAIT period.
net.ipv4.tcp_rfc1337 = 1
```

iptables off).

cat /etc/nginx/nginx.conf

```
user  nginx nginx;
worker_processes  4;

worker_rlimit_nofile    16384;

error_log  /var/log/nginx/error.log debug;


events {
 worker_connections  16384;
 use epoll;
}
```

```
http {
 include       /etc/nginx/mime.types;
 default_type  text/plain;

 log_format  main  '$remote_addr - $remote_user [$time_local] "$request" '
    '"$status" $body_bytes_sent "$http_referer" '
    '"$http_user_agent" "$http_x_forwarded_for" '
    '$request_time "$upstream_addr" [$upstream_response_time]';


 log_format compat '$remote_addr - $remote_user [$time_local] "$request" '
    '"$status" $body_bytes_sent "$http_referer" '
    '"$http_user_agent" "$http_x_forwarded_for"';

 sendfile       on;
 tcp_nopush     on;
 tcp_nodelay    on;

 client_header_timeout  60;
 client_body_timeout    60;
 send_timeout           30;
 keepalive_timeout  0;

 reset_timedout_connection  on;

       server {
            listen 80 default backlog=16384 rcvbuf=4096 sndbuf=4096 deferred;
            server_name .test.ru;

            error_log  /var/log/nginx/test.ru_error.log debug;
            access_log /var/log/nginx/test.ru_access_main.log main;

        location /nginx_status {
             stub_status on;
             access_log   off;
       }

            fastcgi_intercept_errors on;
            proxy_intercept_errors on;

            error_page   500 502 503 504  /50x_empty.html;
            error_page   400 401 402 403 404 405  /50x_empty.html;
            location = /50x_empty.html {
                  root   /home/nginx/htdocs;
            }

            location ~ \.(wml|php)$ {
                  proxy_read_timeout    3;
```

```
                proxy_connect_timeout 3;
                proxy_pass   http://127.0.0.1:8080;
                proxy_set_header   X-Real-IP        $remote_addr;
                proxy_set_header   X-Forwarded-For  $proxy_add_x_forwarded_for;
                proxy_set_header   Host             $host;
            }
        }
}
```

httpd-2.2.8/2.2.9.

```
<?
$max = 0;
for($i=0;$i<1000;$i++){
    $t = microtime(true);
 file_get_contents("http://192.168.1.10/nginx_status");
    $t = microtime(true)-$t;
    if ($t>$max) $max = $t;
}
echo $max;
?>
```

```
while : ; do php dummy.php ; done | grep -e "[1-9]\.[0-9]"
```

```
3.0010089874268
3.0013828277588
3.001168012619
3.0015661716461
3.0009059906006
3.0006580352783
3.0018539428711
3.0014488697052
3.0009009838104
```

3.0018038749695

```
cat /proc/user_beancounters
Version: 2.5
       uid  resource           held    maxheld    barrier      limit    failcnt
    1100:  kmemsize        4334631    9382841 2147483647 2147483647          0
           lockedpages           0          0 2147483647 2147483647          0
           privvmpages      245588     246632 2147483647 2147483647          0
           shmpages              1          1 2147483647 2147483647          0
           dummy                 0          0          0          0          0
           numproc             118        122 2147483647 2147483647          0
           physpages         34130      34505 2147483647 2147483647          0
           vmguarpages           0          0 2147483647 2147483647          0
           oomguarpages      34130      34505 2147483647 2147483647          0
           numtcpsock           14         16 2147483647 2147483647          0
           numflock              1          2 2147483647 2147483647          0
           numpty                0          1 2147483647 2147483647          0
           numsiginfo            0          2 2147483647 2147483647          0
           tcpsndbuf        125216     125216 2147483647 2147483647          0
           tcprcvbuf        229376     229376 2147483647 2147483647          0
           othersockbuf      11180      13416 2147483647 2147483647          0
           dgramrcvbuf           0          0 2147483647 2147483647          0
           numothersock         11         13 2147483647 2147483647          0
           dcachesize            0          0 2147483647 2147483647          0
           numfile            2082       2158 2147483647 2147483647          0
           dummy                 0          0          0          0          0
           dummy                 0          0          0          0          0
           dummy                 0          0          0          0          0
           numiptent            10         10 2147483647 2147483647          0
       0:  kmemsize        3298695   16916897 2147483647 2147483647          0
           lockedpages        1083       1083 2147483647 2147483647          0
           privvmpages       12459      14060 2147483647 2147483647          0
           shmpages            656        672 2147483647 2147483647          0
           dummy                 0          0 2147483647 2147483647          0
           numproc              73         85 2147483647 2147483647          0
           physpages          4553       4994 2147483647 2147483647          0
           vmguarpages           0          0 2147483647 2147483647          0
           oomguarpages       4553       4994 2147483647 2147483647          0
           numtcpsock            3          3 2147483647 2147483647          0
           numflock              4          5 2147483647 2147483647          0
           numpty                1          1 2147483647 2147483647          0
```

```
numsiginfo          0        2 2147483647 2147483647        0
tcpsndbuf       35724    35724 2147483647 2147483647        0
tcprcvbuf       49152    32768 2147483647 2147483647        0
othersockbuf   154284   161420 2147483647 2147483647        0
dgramrcvbuf         0     8380 2147483647 2147483647        0
numothersock      122      126 2147483647 2147483647        0
dcachesize          0        0 2147483647 2147483647        0
numfile          1531     1771 2147483647 2147483647        0
dummy               0        0 2147483647 2147483647        0
dummy               0        0 2147483647 2147483647        0
dummy               0        0 2147483647 2147483647        0
numiptent          10       10 2147483647 2147483647        0
```