

Using **systemctl list-units -all**

2- systemctl to change default target

Using **systemctl set-default multi-user.target**

3- send mail to root

First installing sendmail and sendmail.cf

Editing /etc/mail/local-host-names

Editing the /etc/mail/mail.cf and adding the hosts to the L in the localHosts

```
# class E: names that should be exposed as from this host, even if we masquerade
# class L: names that should be delivered locally, even if we have a relay
# class M: domains that should be converted to $M
# class N: domains that should not be converted to $M
#CL root
C{E}root
C{L}localhost.localdomain
C{L}za3bola.com
```

And finally make and restart the service

```
[vomato@www mail]$ make
[vomato@www mail]$ systemctl restart sendmail.service
==== AUTHENTICATING FOR org.freedesktop.systemd1.manage-units ====
Authentication is required to restart 'sendmail.service'.
Authenticating as: Vomato (vomato)
Password:
polkit-agent-helper-1: pam_authenticate failed: Authentication failure
==== AUTHENTICATION FAILED ====
Failed to restart sendmail.service: Access denied
See system logs and 'systemctl status sendmail.service' for details.
[vomato@www mail]$ sudo systemctl restart sendmail.service
[sudo] password for vomato:
[vomato@www mail]$
```

Send an email to root user

```
[vomato@www mail]$ sendmail root@localhost.localdomain
From root@www.za3bola.com Sun Jan 26 15:08:10 2025
Return-Path: <root@www.za3bola.com>
Received: from www.za3bola.com (localhost [127.0.0.1])
    by www.za3bola.com (8.16.1/8.16.1) with ESMTPS id 50QD8Ak2002776
    (version=TLSv1.3 cipher=TLS_AES_256_GCM_SHA384 bits=256 verify=NOT)
    for <vomato@localhost.localdomain>; Sun, 26 Jan 2025 15:08:10 +0200
Received: (from root@localhost)
    by www.za3bola.com (8.16.1/8.16.1/Submit) id 50QCqm3u002160
    for vomato@localhost.localdomain; Sun, 26 Jan 2025 14:52:48 +0200
Date: Sun, 26 Jan 2025 14:52:48 +0200
From: root <root@www.za3bola.com>
Message-Id: <202501261252.50QCqm3u002160@www.za3bola.com>
Subject: hello
```

4- And check your mail in /var/spool/mail

```
Activities Terminal Jan 26 15:20
root@www:/var/spool/mail

From root@www.za3bola.com Sun Jan 26 15:08:10 2025
Return-Path: <root@www.za3bola.com>
Received: from www.za3bola.com (localhost [127.0.0.1])
    by www.za3bola.com (8.16.1/8.16.1) with ESMTPS id 50QD8AKC002776
    (version=TLSv1.3 cipher=TLS_AES_256_GCM_SHA384 bits=256 verify=NOT)
    for <root@za3bola.com>; Sun, 26 Jan 2025 15:08:10 +0200
Received: (from root@localhost)
    by www.za3bola.com (8.16.1/8.16.1/Submit) id 50QCasvh001818
    for root@za3bola.com; Sun, 26 Jan 2025 14:36:54 +0200
Date: Sun, 26 Jan 2025 14:36:54 +0200
From: root <root@www.za3bola.com>
Message-Id: <202501261236.50QCasvh001818@www.za3bola.com>

kwoqfkoqkwfwqokf
iwdiqjdwijq

From vomato@www.za3bola.com Sun Jan 26 15:08:10 2025
Return-Path: <vomato@www.za3bola.com>
Received: from www.za3bola.com (localhost [127.0.0.1])
    by www.za3bola.com (8.16.1/8.16.1) with ESMTPS id 50QD8AKC002776
    (version=TLSv1.3 cipher=TLS_AES_256_GCM_SHA384 bits=256 verify=NOT)
    for <root@localhost.localdomain>; Sun, 26 Jan 2025 15:08:10 +0200
Received: (from vomato@localhost)
    by www.za3bola.com (8.16.1/8.16.1/Submit) id 50QCLN0l002056
    for root@localhost.localdomain; Sun, 26 Jan 2025 14:47:23 +0200
Date: Sun, 26 Jan 2025 14:47:23 +0200
From: Vomato <vomato@www.za3bola.com>
Message-Id: <202501261247.50QCLN0l002056@www.za3bola.com>

hello from vomato
hello
hello

From vomato@www.za3bola.com Sun Jan 26 15:20:05 2025
Return-Path: <vomato@www.za3bola.com>
Received: from www.za3bola.com (localhost [127.0.0.1])
    by www.za3bola.com (8.16.1/8.16.1) with ESMTPS id 50QDKSxv002952
    (version=TLSv1.3 cipher=TLS_AES_256_GCM_SHA384 bits=256 verify=NOT)
    for <root@localhost.localdomain>; Sun, 26 Jan 2025 15:20:05 +0200
Received: (from vomato@localhost)
    by www.za3bola.com (8.16.1/8.16.1/Submit) id 50QDJVG4002950
    for root@localhost.localdomain; Sun, 26 Jan 2025 15:19:57 +0200
Received: from www.za3bola.com (localhost [127.0.0.1])
    by www.za3bola.com (8.16.1/8.16.1) with ESMTPS id 50QD8AK2002776
    (version=TLSv1.3 cipher=TLS_AES_256_GCM_SHA384 bits=256 verify=NOT)
    for <vomato@localhost.localdomain>; Sun, 26 Jan 2025 15:08:10 +0200
Received: (from root@localhost)
    by www.za3bola.com (8.16.1/8.16.1/Submit) id 50QCqm3u002160
    for vomato@localhost.localdomain; Sun, 26 Jan 2025 14:52:48 +0200
Date: Sun, 26 Jan 2025 14:52:48 +0200
From: root <root@www.za3bola.com>
Message-Id: <202501261252.50QCqm3u002160@www.za3bola.com>
Subject: hello
```

5- stop the sendmail service

```
[root@www mail]# systemctl stop sendmail
[root@www mail]# systemctl status sendmail
○ sendmail.service - Sendmail Mail Transport Agent
   Loaded: loaded (/usr/lib/systemd/system/sendmail.service; enabled; vendor preset: disabled)
   Active: inactive (dead) since Sun 2025-01-26 15:21:54 EET; 4s ago
     Duration: 3min 40.271s
    Process: 2928 ExecStartPre=/etc/mail/make (code=exited, status=0/SUCCESS)
   Process: 2930 ExecStartPre=/etc/mail/make aliases (code=exited, status=0/SUCCESS)
   Process: 2934 ExecStart=/usr/sbin/sendmail -bd $SENDMAIL_OPTS $SENDMAIL_OPTARG (code=exited, status=0/SUCCESS)
    Main PID: 2935 (code=exited, status=0/SUCCESS)
      CPU: 208ms

Jan 26 15:18:13 www.za3bola.com systemd[1]: Starting Sendmail Mail Transport Agent...
Jan 26 15:18:13 www.za3bola.com sendmail[2935]: starting daemon (8.16.1): SMTP+queueing@01:00:00
Jan 26 15:18:13 www.za3bola.com systemd[1]: sendmail.service: Can't open PID file /run/sendmail.pid (yet?) after start: Operation not permitted
Jan 26 15:18:13 www.za3bola.com systemd[1]: Started Sendmail Mail Transport Agent.
Jan 26 15:20:05 www.za3bola.com sendmail[2952]: STARTTLS=server, relay=localhost [127.0.0.1], version=TLSv1.3, verify=NOT, cipher=TLS_AES_256_GCM_SHA384, bits=256/256
Jan 26 15:20:05 www.za3bola.com sendmail[2952]: 50QDKSxv002952: from=<vomato@www.za3bola.com>, size=760, class=0, nrcpts=1, msgid=<202501261252.50QCqm3u002160@www.za3bola.com>, proto=ESMTPS, daemon=MTA, relay=
Jan 26 15:20:05 www.za3bola.com sendmail[2953]: 50QDKSxv002952: to=<root@localhost.localdomain>, ctldaddr=<vomato@www.za3bola.com> (1000/1000), delay=00:00:00, xdelay=00:00:00, mailer=local, pri=31044, dsn=2.0.0
Jan 26 15:21:54 www.za3bola.com systemd[1]: Stopping Sendmail Mail Transport Agent...
Jan 26 15:21:54 www.za3bola.com sendmail.service: Deactivated successfully.
Jan 26 15:21:54 www.za3bola.com systemd[1]: Stopped Sendmail Mail Transport Agent.
lines 1-20/20 (END)
```

6- send mail again

```

^C[root@www mail]# sendmail vomato@localhost.localdomain
hello
hello this is testing after stopping service
[root@www mail]# systemctl status sendmail.service
○ sendmail.service - Sendmail Mail Transport Agent
   Loaded: loaded (/usr/lib/systemd/system/sendmail.service; enabled; vendor preset: disabled)
   Active: inactive (dead) since Sun 2025-01-26 15:21:54 EET; 1min 50s ago
     Duration: 3min 40-271s
    Process: 2928 ExecStartPre=/etc/mail/make (code=exited, status=0/SUCCESS)
    Process: 2930 ExecStartPre=/etc/mail/make aliases (code=exited, status=0/SUCCESS)
    Process: 2934 ExecStartPre=/usr/sbin/sendmail -bd $SENDMAIL_OPTS $SENDMAIL_OPTARG (code=exited, status=0/SUCCESS)
   Main PID: 2935 (code=exited, status=0/SUCCESS)
      CPU: 208ms

Jan 26 15:18:13 www.za3bola.com systemd[1]: Starting Sendmail Mail Transport Agent...
Jan 26 15:18:13 www.za3bola.com sendmail[2935]: starting daemon (8.16.1): SMTP+queueing@01:00:00
Jan 26 15:18:13 www.za3bola.com systemd[1]: sendmail.service: Can't open PID file /run/sendmail.pid (yet?) after start: Operation not permitted
Jan 26 15:18:13 www.za3bola.com systemd[1]: Started Sendmail Mail Transport Agent.
Jan 26 15:20:05 www.za3bola.com sendmail[2952]: STARTTLSserver, relaylocalhost [127.0.0.1], version=TLSv1.3, verify=NOT, cipher=TLS_AES_256_GCM_SHA384, bits=256/256
Jan 26 15:20:05 www.za3bola.com sendmail[2952]: 50QDK5xv002952: from=<vomato@www.za3bola.com>, size=760, class=0, nrcpts=1, msgid=<202501261252.50QCq3u002160@www.za3bola.com>, proto=ESMTPS, daemon=MTA, relay=
Jan 26 15:20:05 www.za3bola.com sendmail[2953]: 50QDK5xv002952: to=root@localhost.localdomain, ctladdr=vomato@www.za3bola.com (1000/1000), delay=00:00:00, xdelay=00:00:00, mailer=local, pri=31044, dsn=2.0.0
Jan 26 15:21:54 www.za3bola.com systemd[1]: Stopping Sendmail Mail Transport Agent...
Jan 26 15:21:54 www.za3bola.com systemd[1]: sendmail.service: Deactivated successfully.
Jan 26 15:21:54 www.za3bola.com systemd[1]: Stopped Sendmail Mail Transport Agent.
[root@www mail]# vim vomato
[root@www mail]#

```

7- verify that you have received the email

No message is sent to the user vomato

```

by www.za3bola.com (8.16.1/8.16.1) with ESMTPS id 50QDBAK4002776
(version=TLSv1.3 cipher=TLS_AES_256_GCM_SHA384 bits=256 verify=NOT)
for <vomato@za3bola.com>; Sun, 26 Jan 2025 15:08:10 +0200
Received: (from root@localhost)
by www.za3bola.com (8.16.1/8.16.1/Submit) id 50QCs53h002180
for vomato@za3bola.com; Sun, 26 Jan 2025 14:54:05 +0200
Date: Sun, 26 Jan 2025 14:54:05 +0200
From: root <root@www.za3bola.com>
Message-Id: <202501261254.50QCs53h002180@www.za3bola.com>
Subject: hello

From root@www.za3bola.com Sun Jan 26 15:08:22 2025
Return-Path: <root@www.za3bola.com>
Received: from www.za3bola.com (localhost [127.0.0.1])
by www.za3bola.com (8.16.1/8.16.1) with ESMTPS id 50QDBMEK002799
(version=TLSv1.3 cipher=TLS_AES_256_GCM_SHA384 bits=256 verify=NOT)
for <vomato@localhost.localdomain>; Sun, 26 Jan 2025 15:08:22 +0200
Received: (from root@localhost)
by www.za3bola.com (8.16.1/8.16.1/Submit) id 50QDBK0b002798
for vomato@localhost.localdomain; Sun, 26 Jan 2025 15:08:20 +0200
Date: Sun, 26 Jan 2025 15:08:20 +0200
From: root <root@www.za3bola.com>
Message-Id: <202501261308.50QDBK0b002798@www.za3bola.com>

"vomato" 56L, 25788
56,0-1 Bot

```

8- starting with systemctl

```

[root@www mail]# systemctl start sendmail.service
[root@www mail]# vim vomato

```

Receiving the message because it was put inside the message queue

9- Checking the message

```

From root@www.za3bola.com Sun Jan 26 15:25:38 2025
Return-Path: <root@www.za3bola.com>
Received: from www.za3bola.com (localhost [127.0.0.1])
by www.za3bola.com (8.16.1/8.16.1) with ESMTPS id 50QDPcDn003049
(version=TLSv1.3 cipher=TLS_AES_256_GCM_SHA384 bits=256 verify=NOT)
for <vomato@localhost.localdomain>; Sun, 26 Jan 2025 15:25:38 +0200
Received: (from root@localhost)
by www.za3bola.com (8.16.1/8.16.1/Submit) id 50QDNZ9G003009
for vomato@localhost.localdomain; Sun, 26 Jan 2025 15:23:35 +0200
Date: Sun, 26 Jan 2025 15:23:35 +0200
From: root <root@www.za3bola.com>
Message-Id: <202501261323.50QDNZ9G003009@www.za3bola.com>

hello
hello this is testing after stopping service

```

10-switching to multi-user.target

```
[root@www mail]# systemctl status multi-user.target
● multi-user.target - Multi-User System
   Loaded: loaded (/usr/lib/systemd/system/multi-user.target; indirect; vendor preset: disabled)
   Active: active since Sun 2025-01-26 14:00:17 EET; 1h 33min ago
     Until: Sun 2025-01-26 14:00:17 EET; 1h 33min ago
    Docs: man:systemd.special(7)

Jan 26 14:00:17 www.za3bola.com systemd[1]: Reached target Multi-User System.
[root@www mail]# systemctl isolate multi-user.target
Failed to start multi-user.target: Operation refused, unit may not be isolated.
See system logs and 'systemctl status multi-user.target' for details.
[root@www mail]# systemctl isolate multi-user.target
[root@www mail]# man systemctl
[root@www mail]#
```

11- configure system to boot to multi-user.target by default

```
[root@www mail]# systemctl isolate multi-user.target
[root@www mail]# man systemctl
[root@www mail]# systemctl set-default multi-user.target
[root@www mail]# systemctl get-default
multi-user.target
[root@www mail]# systemctl reboot
[root@www mail]# Connection to 192.168.159.130 closed by remote host.
Connection to 192.168.159.130 closed.
tomato@Tomato:~$
```

12 - boot into rescue.target

Systemctl isolate rescue.target

Or boot with boot options using e and select centos.rescue

13- set the default to graphical interface

```
[root@www ~]# systemctl isolate graphical.target^C
[root@www ~]# systemctl set-default graphical.target
[root@www ~]# cd /etc/default/gr
```

14- systemctl status of sshd

```
[root@www default]# vim grub
[root@www default]# systemctl status sshd
● sshd.service - OpenSSH server daemon
   Loaded: loaded (/usr/lib/systemd/system/sshd.service; enabled; vendor preset: enabled)
   Active: active (running) since Sun 2025-01-26 15:55:29 EET; 13min ago
     Docs: man:sshd(8)
           man:sshd_config(5)
  Main PID: 1146 (sshd)
    Tasks: 1 (limit: 18026)
   Memory: 5.5M
      CPU: 46ms
   CGroup: /system.slice/sshd.service
           └─1146 "sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups"

Jan 26 15:55:29 localhost systemd[1]: Starting OpenSSH server daemon...
Jan 26 15:55:29 localhost sshd[1146]: Server listening on 0.0.0.0 port 22.
Jan 26 15:55:29 localhost sshd[1146]: Server listening on :: port 22.
Jan 26 15:55:29 localhost systemd[1]: Started OpenSSH server daemon.
Jan 26 16:00:41 www.za3bola.com sshd[2267]: Accepted password for root from 192.168.159.1 port 52904 ssh2
Jan 26 16:00:41 www.za3bola.com sshd[2267]: pam_unix(sshd:session): session opened for user root(uid=0) by (uid=0)
[root@www default]#
```

Daemon Pid of 1146

15- sshd restart with the pid of 2411

```
[root@www default]# systemctl restart sshd
[root@www default]# systemctl status sshd
● sshd.service - OpenSSH server daemon
   Loaded: loaded (/usr/lib/systemd/system/sshd.service; enabled; vendor preset: enabled)
   Active: active (running) since Sun 2025-01-26 16:10:13 EET; 3s ago
     Docs: man:sshd(8)
           man:sshd_config(5)
  Main PID: 2411 (sshd)
    Tasks: 1 (limit: 18026)
   Memory: 1.7M
      CPU: 12ms
   CGroup: /system.slice/sshd.service
           └─2411 "sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups"

Jan 26 16:10:13 www.za3bola.com systemd[1]: Starting OpenSSH server daemon...
Jan 26 16:10:13 www.za3bola.com sshd[2411]: Server listening on 0.0.0.0 port 22.
Jan 26 16:10:13 www.za3bola.com sshd[2411]: Server listening on :: port 22.
Jan 26 16:10:13 www.za3bola.com systemd[1]: Started OpenSSH server daemon.
```

16- reloading the sshd service and the same pid of 2411

```
Jan 26 16:10:13 www.za3bola.com systemd[1]: Started OpenSSH server daemon.
[root@www default]# systemctl reload sshd
[root@www default]# systemctl status sshd
● sshd.service - OpenSSH server daemon
   Loaded: loaded (/usr/lib/systemd/system/sshd.service; enabled; vendor preset: enabled)
   Active: active (running) since Sun 2025-01-26 16:10:13 EET; 2min 26s ago
     Docs: man:sshd(8)
           man:sshd_config(5)
  Process: 2418 ExecReload=/bin/kill -HUP $MAINPID (code=exited, status=0/SUCCESS)
  Main PID: 2411 (sshd)
    Tasks: 1 (limit: 18026)
   Memory: 1.8M
      CPU: 21ms
   CGroup: /system.slice/sshd.service
           └─2411 "sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups"

Jan 26 16:10:13 www.za3bola.com systemd[1]: Starting OpenSSH server daemon...
Jan 26 16:10:13 www.za3bola.com sshd[2411]: Server listening on 0.0.0.0 port 22.
Jan 26 16:10:13 www.za3bola.com sshd[2411]: Server listening on :: port 22.
Jan 26 16:10:13 www.za3bola.com systemd[1]: Started OpenSSH server daemon.
Jan 26 16:12:38 www.za3bola.com systemd[1]: Reloading OpenSSH server daemon...
Jan 26 16:12:38 www.za3bola.com sshd[2411]: Received SIGHUP; restarting.
Jan 26 16:12:38 www.za3bola.com systemd[1]: Reloaded OpenSSH server daemon.
Jan 26 16:12:38 www.za3bola.com sshd[2411]: Server listening on 0.0.0.0 port 22.
Jan 26 16:12:38 www.za3bola.com sshd[2411]: Server listening on :: port 22.
```

17- chronyd is running

```
Jan 26 16:12:38 www.za3bola.com sshd[2411]: Server listening on 0.0.0.0 port 22.
Jan 26 16:12:38 www.za3bola.com sshd[2411]: Server listening on :: port 22.
[root@www default]# systemctl status chronyd
● chronyd.service - NTP client/server
   Loaded: loaded (/usr/lib/systemd/system/chronyd.service; enabled; vendor preset: enabled)
   Active: active (running) since Sun 2025-01-26 15:55:29 EET; 18min ago
     Docs: man:chronyd(8)
           man:chrony.conf(5)
  Main PID: 1010 (chronyd)
    Tasks: 1 (limit: 18026)
   Memory: 3.7M
      CPU: 80ms
   CGroup: /system.slice/chronyd.service
           └─1010 /usr/sbin/chronyd -F 2

Jan 26 15:55:28 localhost systemd[1]: Starting NTP client/server...
Jan 26 15:55:29 localhost chronyd[1010]: chronyd version 4.2 starting (+CMDMON +NTP +REFCLOCK +RTC +PRIVDROP +SCFILTER +
Jan 26 15:55:29 localhost chronyd[1010]: Frequency -1.251 +/- 0.789 ppm read from /var/lib/chrony/drift
Jan 26 15:55:29 localhost chronyd[1010]: Using right/UTC timezone to obtain leap second data
Jan 26 15:55:29 localhost chronyd[1010]: Loaded seccomp filter (level 2)
Jan 26 15:55:29 localhost systemd[1]: Started NTP client/server.
Jan 26 15:55:35 www.za3bola.com chronyd[1010]: Selected source 45.132.96.81 (2.centos.pool.ntp.org)
Jan 26 15:55:35 www.za3bola.com chronyd[1010]: System clock TAI offset set to 37 seconds
Jan 26 15:56:42 www.za3bola.com chronyd[1010]: Selected source 5.196.160.139 (2.centos.pool.ntp.org)
Jan 26 16:02:07 www.za3bola.com chronyd[1010]: Selected source 45.132.96.81 (2.centos.pool.ntp.org)
```

18-stopping the chronyd service

```
Jan 26 16:02:07 www.za3bola.com chronyd[1010]: Selected source 45.132.96.81 (2.centos.pool.ntp.org)
[root@www default]# systemctl stop chronyd
[root@www default]# systemctl status chronyd
○ chronyd.service - NTP client/server
   Loaded: loaded (/usr/lib/systemd/system/chronyd.service; enabled; vendor preset: enabled)
   Active: inactive (dead) since Sun 2025-01-26 16:14:51 EET; 1s ago
     Duration: 19min 22.022s
       Docs: man:chronyd(8)
             man:chrony.conf(5)
    Main PID: 1010 (code=exited, status=0/SUCCESS)
       CPU: 83ms

Jan 26 15:55:29 localhost chronyd[1010]: Loaded seccomp filter (level 2)
Jan 26 15:55:29 localhost systemd[1]: Started NTP client/server.
Jan 26 15:55:35 www.za3bola.com chronyd[1010]: Selected source 45.132.96.81 (2.centos.pool.ntp.org)
Jan 26 15:55:35 www.za3bola.com chronyd[1010]: System clock TAI offset set to 37 seconds
Jan 26 15:56:42 www.za3bola.com chronyd[1010]: Selected source 5.196.160.139 (2.centos.pool.ntp.org)
Jan 26 16:02:07 www.za3bola.com chronyd[1010]: Selected source 45.132.96.81 (2.centos.pool.ntp.org)
Jan 26 16:14:51 www.za3bola.com systemd[1]: Stopping NTP client/server...
Jan 26 16:14:51 www.za3bola.com chronyd[1010]: chronyd exiting
Jan 26 16:14:51 www.za3bola.com systemd[1]: chronyd.service: Deactivated successfully.
Jan 26 16:14:51 www.za3bola.com systemd[1]: Stopped NTP client/server.
[root@www default]#
```

19- chronyd is enabled on systemstart

```
" =====
" Netrw Directory Listing                                (netrw v170)
" /etc/systemd/system/multi-user.target.wants
" Sorted by      name
" Sort sequence: [\|]$,\<core%\(\.d\+\)\|=|>,\.h$,\.c$,\.cpp$,\-|=*$,*\,.o$,\.obj$,\.info$,\.swp$,\.bak$,\~$
" Quick Help: <F1>:help  -:go up dir  D:delete  R:rename  S:sort-by  X:special
" =====
./
./
ModemManager.service@ --> /usr/lib/systemd/system/ModemManager.service
NetworkManager.service@ --> /usr/lib/systemd/system/NetworkManager.service
atd.service@ --> /usr/lib/systemd/system/atd.service
auditd.service@ --> /usr/lib/systemd/system/auditd.service
avahi-daemon.service@ --> /usr/lib/systemd/system/avahi-daemon.service
chronyd.service@ --> /usr/lib/systemd/system/chronyd.service
crond.service@ --> /usr/lib/systemd/system/crond.service
cups.path@ --> /usr/lib/systemd/system/cups.path
cups.service@ --> /usr/lib/systemd/system/cups.service
docker.service@ --> /usr/lib/systemd/system/docker.service
firewalld.service@ --> /usr/lib/systemd/system/firewalld.service
httpd.service@ --> /usr/lib/systemd/system/httpd.service
irqbalance.service@ --> /usr/lib/systemd/system/irqbalance.service
kdump.service@ --> /usr/lib/systemd/system/kdump.service
libstoragemgmt.service@ --> /usr/lib/systemd/system/libstoragemgmt.service
mcelog.service@ --> /usr/lib/systemd/system/mcelog.service
mdmonitor.service@ --> /usr/lib/systemd/system/mdmonitor.service
remote-fs.target@ --> /usr/lib/systemd/system/remote-fs.target
rsyslog.service@ --> /usr/lib/systemd/system/rsyslog.service
run-vmblock\x2dfuse.mount@ --> /usr/lib/systemd/system/run-vmblock\x2dfuse.mount
sendmail.service@ --> /usr/lib/systemd/system/sendmail.service
sm-client.service@ --> /usr/lib/systemd/system/sm-client.service
smartd.service@ --> /usr/lib/systemd/system/smartd.service
sshd.service@ --> /usr/lib/systemd/system/sshd.service
sssd.service@ --> /usr/lib/systemd/system/sss.service
tuned.service@ --> /usr/lib/systemd/system/tuned.service
vmttoolsd.service@ --> /usr/lib/systemd/system/vmttoolsd.service
~
~

[root@www default]# systemctl status chronyd
○ chronyd.service - NTP client/server
   Loaded: loaded (/usr/lib/systemd/system/chronyd.service; enabled; vendor preset: enabled)
   Active: inactive (dead) since Sun 2025-01-26 16:14:51 EET; 1s ago
```

20- rebooting the system

```
[root@www default]# systemctl status chronyd
● chronyd.service - NTP client/server
   Loaded: loaded (/usr/lib/systemd/system/chronyd.service; enabled; vendor preset: enabled)
   Active: active (running) since Sun 2025-01-26 16:19:10 EET; 5s ago
     Docs: man:chronyd(8)
           man:chrony.conf(5)
  Process: 2561 ExecStart=/usr/sbin/chronyd $OPTIONS (code=exited, status=0/SUCCESS)
 Main PID: 2561 (chronyd)
   Tasks: 1 (limit: 18026)
  Memory: 1.0M
    CPU: 31ms
   CGroup: /system.slice/chronyd.service
           └─2561 /usr/sbin/chronyd -F 2

Jan 26 16:19:10 www.za3bola.com systemd[1]: Starting NTP client/server...
Jan 26 16:19:10 www.za3bola.com chronyd[2561]: chronyd version 4.2 starting (+CMDMON +NTP +REFCLOCK +RTC +PRIVDROP +SCFILTER +SIGND +ASYNCDNS +NTS +SECHASH +IPV6 +DEBUG)
Jan 26 16:19:10 www.za3bola.com chronyd[2561]: Frequency -1.537 +/- 1.320 ppm read from /var/lib/chrony/drift
Jan 26 16:19:10 www.za3bola.com chronyd[2561]: Using right/UTC timezone to obtain leap second data
Jan 26 16:19:10 www.za3bola.com chronyd[2561]: Loaded seccomp filter (level 2)
Jan 26 16:19:10 www.za3bola.com systemd[1]: Started NTP client/server.
Jan 26 16:19:15 www.za3bola.com chronyd[2561]: Selected source 82.65.235.151 (2.centos.pool.ntp.org)
Jan 26 16:19:15 www.za3bola.com chronyd[2561]: System clock TAI offset set to 37 seconds
```

21- disabling chronyd system

```
[root@www default]# systemctl disable chronyd
Removed /etc/systemd/system/multi-user.target.wants/chronyd.service.
[root@www default]# vim /etc/systemd/system/multi-user.target.wants
[root@www default]#
```

22- rebooting and checking the chronyd service

```
Removed /etc/systemd/system/multi-user.target.wants/chronyd.service.
[root@www default]# systemctl status chronyd
○ chronyd.service - NTP client/server
   Loaded: loaded (/usr/lib/systemd/system/chronyd.service; disabled; vendor preset: enabled)
   Active: inactive (dead)
     Docs: man:chronyd(8)
           man:chrony.conf(5)
```

23- editing the grub file in /etc/default/grub

```
root@www:/etc/default
GRUB_TIMEOUT=8
GRUB_DISTRIBUTOR="$(sed 's, release .*$,g' /etc/system-release)"
GRUB_DEFAULT=saved
GRUB_DISABLE_SUBMENU=true
GRUB_TERMINAL_OUTPUT="console"
GRUB_CMDLINE_LINUX="resume=/dev/mapper/cs-swap rd.lvm.lv=cs/root rd.lvm.lv=cs/swap rhgb quiet"
GRUB_DISABLE_RECOVERY="true"
GRUB_ENABLE_BLSCFG=true
systemd.unified_cgroup_hierarchy=0
```

Changing it into 8 secs

24- editing the grub file to change timeout to 20sc

```
root@www:/etc/default
GRUB_TIMEOUT=20
GRUB_DISTRIBUTOR="$(sed 's, release .*$,g' /etc/system-release)"
GRUB_DEFAULT=saved
GRUB_DISABLE_SUBMENU=true
GRUB_TERMINAL_OUTPUT="console"
GRUB_CMDLINE_LINUX="resume=/dev/mapper/cs-swap rd.lvm.lv=cs/root rd.lvm.lv=cs/swap rhgb quiet"
GRUB_DISABLE_RECOVERY="true"
GRUB_ENABLE_BLSCFG=true
systemd.unified_cgroup_hierarchy=0
```


25- change default operating system to be rescue.target

```
GRUB_TIMEOUT=20
GRUB_DISTRIBUTOR="$(sed 's, release .*$,,g' /etc/system-release)"
GRUB_DEFAULT=0
GRUB_DISABLE_SUBMENU=true
GRUB_TERMINAL_OUTPUT="console"
GRUB_CMDLINE_LINUX="resume=/dev/mapper/cs-swap rd.lvm.lv=cs/root rd.lvm.lv=cs/swap rhgb quiet "
GRUB_DISABLE_RECOVERY="true"
GRUB_ENABLE_BLSCFG=true
systemd.unified_cgroup_hierarchy=0
--
--
--
```

26- changing background is using GRUB_BACKGROUND Key and editing it

```
GRUB_TIMEOUT=20
GRUB_DISTRIBUTOR="$(sed 's, release .*$,,g' /etc/system-release)"
GRUB_DEFAULT=0
GRUB_DISABLE_SUBMENU=true
GRUB_TERMINAL_OUTPUT="console"
GRUB_CMDLINE_LINUX="resume=/dev/mapper/cs-swap rd.lvm.lv=cs/root rd.lvm.lv=cs/swap rhgb quiet "
GRUB_DISABLE_RECOVERY="true"
GRUB_ENABLE_BLSCFG=true
systemd.unified_cgroup_hierarchy=0
GRUB_BACKGROUND="path.jpg"
--
--
--
```