tmpfs　/tmp 3
  RHEL 3
  Amazon AWS EC2 7

tmpfs   /tmp

—   2024/10/17 07:36

tmpfs   .

.   : <https://www.kernel.org/doc/html/v6.6/filesystems/tmpfs.html>

.

/tmp   tmpfs   .

RHEL

/usr/lib/systemd/system/tmp.mount   .

```
#  SPDX-License-Identifier: LGPL-2.1-or-later
#
#  This file is part of systemd.
#
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#  the Free Software Foundation; either version 2.1 of the License, or
#  (at your option) any later version.

[Unit]
Description=Temporary Directory /tmp
Documentation=https://systemd.io/TEMPORARY_DIRECTORIES
Documentation=man:file-hierarchy(7)
Documentation=https://www.freedesktop.org/wiki/Software/systemd/APIFileSyste
ms
ConditionPathIsSymbolicLink=!/tmp
DefaultDependencies=no
Conflicts=umount.target
Before=local-fs.target umount.target
After=swap.target

[Mount]
What=tmpfs
Where=/tmp
Type=tmpfs
Options=mode=1777,strictatime,nosuid,nodev,size=50%%,nr_inodes=1m

# Make 'systemctl enable tmp.mount' work:
[Install]
WantedBy=local-fs.target
```

systemd   /tmp   tmpfs   .

```
$ systemctl enable tmp.mount
```

/tmp   tmpfs   .

.

/usr/lib/systemd/system/basic.target   .

```
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[Unit]
Description=Basic System
Documentation=man:systemd.special(7)
Requires=sysinit.target
Wants=sockets.target timers.target paths.target slices.target
After=sysinit.target sockets.target paths.target slices.target tmp.mount

# We support /var, /tmp, /var/tmp, being on NFS, but we don't pull in
# remote-fs.target by default, hence pull them in explicitly here. Note that
we
# require /var and /var/tmp, but only add a Wants= type dependency on /tmp,
as
# we support that unit being masked, and this should not be considered an
error.
RequiresMountsFor=/var /var/tmp
# RHEL-only: Disable /tmp on tmpfs.
#Wants=tmp.mount
```

```
# RHEL-only: Disable /tmp on tmpfs.
#Wants=tmp.mount
```

. RHEL   /tmp   tmpfs   .
Wants=tmp.mount   /tmp   tmpfs   .

umount /tmp   systemctl stop tmp.mount
systemd   tmp.mount   .

/tmp

.

```
[root@localhost ~]# df -hP
Filesystem          Size  Used Avail Use% Mounted on
devtmpfs            4.0M     0  4.0M   0% /dev
tmpfs               636M     0  636M   0% /dev/shm
tmpfs               255M  3.8M  251M   2% /run
/dev/mapper/rl-root  17G  1.3G   16G   8% /
/dev/vda1           960M  225M  736M  24% /boot
tmpfs               128M     0  128M   0% /run/user/0
tmpfs               636M     0  636M   0% /tmp

[root@localhost ~]# mount -o remount,size=10G /tmp

[root@localhost ~]# df -hP
Filesystem          Size  Used Avail Use% Mounted on
devtmpfs            4.0M     0  4.0M   0% /dev
tmpfs               636M     0  636M   0% /dev/shm
tmpfs               255M  3.8M  251M   2% /run
/dev/mapper/rl-root  17G  1.3G   16G   8% /
/dev/vda1           960M  225M  736M  24% /boot
tmpfs               128M     0  128M   0% /run/user/0
tmpfs                10G     0   10G   0% /tmp

[root@localhost ~]# free -m
              total        used        free      shared  buff/cache
available
Mem:           1271         306         865           7         249
964
Swap:          2047           0        2047
```

/tmp   10G   ,   1271M   .
/tmp
.   !!

```
[root@localhost ~]# cd /tmp/
[root@localhost tmp]# ll
total 0
[root@localhost tmp]# dd if=/dev/zero of=data bs=1M count=10
10+0 records in
10+0 records out
10485760 bytes (10 MB, 10 MiB) copied, 0.00415868 s, 2.5 GB/s
[root@localhost tmp]# dd if=/dev/zero of=data bs=1M count=100
100+0 records in
100+0 records out
```

```
104857600 bytes (105 MB, 100 MiB) copied, 0.0360715 s, 2.9 GB/s
[root@localhost tmp]# ll -h
total 100M
-rw-r--r--. 1 root root 100M Oct 17 17:05 data
[root@localhost tmp]# dd if=/dev/zero of=data bs=1M count=1000
1000+0 records in
1000+0 records out
1048576000 bytes (1.0 GB, 1000 MiB) copied, 0.375854 s, 2.8 GB/s
[root@localhost tmp]# ll -h
total 1000M
-rw-r--r--. 1 root root 1000M Oct 17 17:05 data
[root@localhost tmp]# free -m
              total        used        free      shared  buff/cache
available
Mem:           1271        1192          75         916        1064
79
Swap:          2047          91        1956
[root@localhost tmp]# dd if=/dev/zero of=data bs=1M count=3000
3000+0 records in
3000+0 records out
3145728000 bytes (3.1 GB, 2.9 GiB) copied, 2.35655 s, 1.3 GB/s
[root@localhost tmp]# ll -h
total 3.0G
-rw-r--r--. 1 root root 3.0G Oct 17 17:05 data
[root@localhost tmp]# free -m
              total        used        free      shared  buff/cache
available
Mem:           1271        1228          64         969        1068
42
Swap:          2047        2047           0
```

3000M

.   free   64

.

?

```
[root@localhost tmp]# dd if=/dev/zero of=data bs=1M count=4000
Connection closing...Socket close.

Connection closed by foreign host.

Disconnected from remote host(192.168.0.203:22) at 17:05:39.

Type `help' to learn how to use Xshell prompt.
[C:\~]$
```

.

Amazon AWS EC2

EC2 /tmp tmpfs .

```
[root@ip-172-31-17-98 system]# df -hP
Filesystem      Size  Used Avail Use% Mounted on
devtmpfs        4.0M     0  4.0M   0% /dev
tmpfs           475M     0  475M   0% /dev/shm
tmpfs           190M  448K  190M   1% /run
/dev/xvda1      8.0G  1.6G  6.4G  20% /
/dev/xvda128     10M  1.3M  8.7M  13% /boot/efi
tmpfs            95M     0   95M   0% /run/user/1000
tmpfs           475M     0  475M   0% /tmp
```

/usr/lib/systemd/system/basic.target
Wants=tmp.mount .

```
[root@ip-172-31-17-98 system]# cat basic.target
#  SPDX-License-Identifier: LGPL-2.1-or-later
#
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we
# require /var and /var/tmp, but only add a Wants= type dependency on /tmp,
as
# we support that unit being masked, and this should not be considered an
error.
RequiresMountsFor=/var /var/tmp
#Wants=tmp.mount     # <<<
```

tmp.mount .

```
[root@ip-172-31-17-98 ~]# systemctl disable --now tmp.mount
```

/tmp   .

systemctl disable tmp.mount   .