

# Increase/Expand an XFS Filesystem in RHEL 7 / CentOS 7

Mattias Geniar, Sunday, August 2, 2015

This guide will explain how to grow an XFS filesystem once you've increased in the underlying storage.

If you're on a VMware machine, have a look at this guide to increase the block device, partition and LVM volume first: [Increase A VMware Disk Size \(VMDK\) Formatted As Linux LVM without rebooting \(/increase-a-vmware-disk-size-vmdk-formatted-as-linux-lvm-without-rebooting/\)](#). Once you reach the `resize2fs` command, return here, as that only applies to EXT2/3/4.

To see the info of your block device, use `xfs_info`.

```
$ xfs_info /dev/mapper/centos-root
meta-data=/dev/mapper/centos-root isize=256    agcount=4, agsize=1210880 blks
         =                               sectsz=512   attr=2, projid32bit=1
         =                               crc=0
data     =                               bsize=4096   blocks=4843520, imaxpct=25
         =                               sunit=0      swidth=0 blks
naming   =version 2                     bsize=4096   ascii-ci=0 ftype=0
log      =internal                      bsize=4096   blocks=2560, version=2
         =                               sectsz=512   sunit=0 blks, lazy-count=1
realtime =none                          extsz=4096   blocks=0, rtextents=0
```

Once the volume group/logical volume has been extended (see [this guide for increasing lvm \(/increase-a-vmware-disk-size-vmdk-formatted-as-linux-lvm-without-rebooting/\)](#)), you can expand the partition using `xfs_growfs`.

```
$ xfs_growfs /dev/mapper/centos-root
meta-data=/dev/mapper/centos-root isize=256    agcount=4, agsize=1210880 blks
         =                               sectsz=512   attr=2, projid32bit=1
         =                               crc=0
data     =                               bsize=4096   blocks=4843520, imaxpct=25
         =                               sunit=0      swidth=0 blks
naming   =version 2                     bsize=4096   ascii-ci=0 ftype=0
log      =internal                      bsize=4096   blocks=2560, version=2
         =                               sectsz=512   sunit=0 blks, lazy-count=1
realtime =none                          extsz=4096   blocks=0, rtextents=0
```

The increase will happen in near-realtime and probably won't take more than a few seconds.

Using just `xfs_growfs`, the filesystem will be increased to its maximum available size. If you want to only increase for a couple of blocks, use the `-D` option.

If you don't see any increase in disksize using `df`, check this guide: [Df command in Linux not updating actual disk space, wrong data \(/df-command-in-linux-not-updating-actual-diskspace-wrong-data/\)](#).

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