Maximum Hard Drive Partitions (2/95)

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TOPIC ---

How many partitions will System 7.1 recognize? I have 21 out a total of 29
partitions visible on the desktop on my server. With SCSI Probe I show all 29,
and it allows access to the partitions through the network.

What are the maximum number of hard drive partitions (volumes) supported under
System 7.1 or 7.5?

DISCUSSION ---

The maximum number of partitions that can be mounted varies and is controlled by
the number of file control blocks (FCB) that are allocated by the system. When a
volume is mounted, there are at least two files open (Desktop DB and Desktop
DF). If the volume is being shared then there are also other files that are
open. In addition, on the startup volume, the system and finder are open as well
as some extensions. All of these use file control blocks.

The default number of FCBs under system 7 at boot time, is around 40. The
problem is during boot time the number of FCBs can not change, but once the
system takes over the number of FCBs can change up to a maximum of 348. The
system software, beginning with System 7, dynamically allocates FCBs based on
available memory when the file control buffer gets filled. It is this behavior
that allows the other volumes to be mounted after the system is up and running
using a SCSI mount utility. There are third party utilities, such as the FWB
hard drive utilities, that allow a user to change the default number of FCBs
allocated at boot time by editing the boot block on the startup volume. There is
also a control panel that comes with Silverlining called SilverInit that will
mount volumes that the system missed.

In the situation you reported, what might be happening is during the boot
process, when the system mounts partitions/volumes, it runs out of file control
blocks after mounting the first 21 volumes. However, after the system is up, the
user can mount the additional 8 volumes with a SCSI utility, since the extra
file control blocks can now be allocated. If you need all 29 volumes at startup,
then you might want to consider a third party utility, such as the FWB
utilities, to increase the default allocation of file control blocks. However,
if all the volumes do not need to be present at startup, then you could continue
to use a utility, such as SCSI Probe, to mount the remaining volumes after the

system boots.

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