System 7.5.x: Large Server Volume Size Shown Incorrect (9/95)

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TOPIC --

I am using System 7.5 and later on some Power Macintosh computers trying to
access a 10 GB hard disk through AppleTalk. The disk is attached to a Microsoft
Windows NT Server. The problem is the server volume size, as viewed by the
Macintosh, is not accurate.

Where is the additional drive space on these network volumes?

DISCUSSION --

This article provides information about a non-Apple product. Apple Computer,
Inc. is not responsible for its content. Please contact the vendor for
additional information.

This would typically be a question for Microsoft, however, we have found a way
to modify Windows NT server 3.5 and 3.51 to correctly report the volume size.
The information below comes from a Microsoft Technical Information Document,
which we are including here for your convenience.

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3.50

WINDOWS

The information in this article applies to:

- Microsoft Windows NT Server version 3.5

SUMMARY
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A registry flag controls the maximum volume size and free space reported by the

Services for Macintosh (SFM) file server. Since System 7.5 now allows
Macintoshes to support volumes up to 4GB-1 (0xFFFFFFFF), administrators may want
to use this flag to help Macintosh clients if all clients are running System 7.5
and the SFM volume resides on a disk partition greater than 2018MB.

MORE INFORMATION
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Pre-System 7.5 Macintoshes support volume sizes up to 2GB-1 (although tests have
shown the actual limit to be around 2018MB). Because of this, SFM restricts the
values it reports for total and free space on SFM volumes to 2018MB, when the
actual size of the SFM volume's disk partition is larger.

System 7.5 can handle volumes up to 4GB-1, and you may find it useful to raise
the maximum values reported for SFM volumes to this new limit.

WARNING: ALL Macs connected to the volume must be System 7.5; reporting a volume
size greater than 2GB-1 to a pre-System 7.5 Macintosh crashes Macintosh Finder.

You can raise the maximum reported size for SFM volumes to 4GB-256 (0xFFFFFF00)
by creating the SFM volume, then editing the registry entry:

    HKEY_LOCAL_MACHINES\System\CurrentControlSet\Services
        \MacFile\Parameters\Volumes\<VolumeName>

    Properties=xxxxx

    by adding 262144 (0x00040000) to the number xxxxx.

WARNING: Using Registry Editor incorrectly can cause serious, system-wide
problems that may require you to reinstall Windows NT to correct them. Microsoft
cannot guarantee that any problems resulting from the use of Registry Editor can
be solved. Use this tool at your own risk.

Stop and restart Macfile to make this change take effect on the SFM volume.

In Windows NT 3.51 you can change this value globally for all volumes. To do
this, add bit 0x10 to the following section of the registry and every volume
will be 4GB enabled:

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\MacFile\Parameters
ServerOptions: REG_DWORD: xxxx

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KBSubCategory: ntmac ntregistry

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29 Sep 1995 - Revised with Microsoft Corporation information.

15 Feb 1995 - Reviewed for technical accuracy, revised System 7.5 keyword.

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