

[Previous](#)[Search](#)[Next](#)[TA Home](#)

100/103

OpenServer 5, NFS client fails to transfer files greater than 8KB.

Keywords

network files system copy fails nfs openserver nic driver mtu blocksize transfer hang **panic** wsize rsize mount /etc/default/filesys ethernet zero-length zero length server not responding

Release

SCO OpenServer Enterprise System Release 5.0.0, 5.0.2, 5.0.4, 5.0.5

Problem

When copying files larger than about 8 kilobytes (KB), the error "NFS server not responding" appears on the console; sometimes the system **panics**.

Cause

NFS read and write transfer sizes default to an 8KB blocksize. The above error is seen when the NFS client cannot handle this size. Usually, this indicates a faulty network adapter driver. That is, the driver is not dealing properly with full frames and back-to-back packets.

This could also be caused by a difference in the mtu (maximum transfer unit) settings on the client and server network interfaces.

Solution

This problem is usually solved by updating the network adapter driver on the client (or replacing the NIC altogether). The interface's settings (including mtu) can be seen in the output of `ndstat -l` and `ifconfig -a`.

As a troubleshooting step and temporary workaround, try mounting the NFS filesystem with a reduced buffer size. This might lower performance, but it will allow NFS transfers to complete:

```
mount -r -f NFS,rsize=1024,wsize=1024 remote_sys:/remote_fs /mountdir
```

where "remote_sys" is the name of the server exporting the filesystem, "remote_fs" is the name of the exported filesystem, and "mountdir" is the name of the directory you are mounting to.

If the above does not help, try increasing the NFS timeout and re-transmission values:

```
mount -r -f NFS,timeo=1000,retrans=25 remote_sys:/remote_fs /mountdir
```

To mount the NFS filesystems with the options on boot, they must be added to the mntopts keyword in the file /etc/default/filesys (see [filesys\(F\)](#) for more information). The following is an example of such an entry reducing the read and write transfer sizes to 1KB:

```
bdev=nfs_svr:/remote mountdir=/remote_mnt fstyp=NFS \  
fsck=no fsckflags= \  
init=yes initcmd="sleep 2" \  
mntopts="bg,soft,rsiz=1024,wsiz=1024,timeo=1000,retrans=25" \  
rcmount=yes rcfck=no \  
mountflags=
```

Notes

Check your network adapter manufacturer's web site or <ftp://ftp.sco.com/pub/drivers> for updated NIC drivers.

See Also

Manual page: [mount\(ADM\)](#)

TA110528 created on 04 October 1999 , last updated on 10 April 2000

Please click this box if this article solved your problem

 Previous

 Search

 Next

 TA Home

Suggestions for improving the content of this article.

 Comments

We appreciate your continued interest in improving the quality of SCO's technical library and welcome your input regarding this technical article. Suggestions submitted from this form will be forwarded to the Documentation department. If you are looking for technical help beyond that provided in the current article, please contact [SCO Support Services](#).

Copyright © 1996-
1998 The Santa
Cruz Operation, Inc.

All Rights Reserved.