Tech Info Library

3COM EtherLink/NB Card: EtherTalk Incompatibility Problem

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TOPIC ---

My office is having trouble with system bombs while using EtherTalk. Can you
help?

Problem Description

Macintosh IIx and Macintosh IIcx systems equipped with the 3COM EtherLink/NB
card (ASSY 4042- 031 REV A or B) running EtherTalk 1.2 intermittently
experience system bombs. Not all Macintoshes display the problem. For
instance, given two identical workstations on the same Ethernet segment, only
one may experience the problem.

Usually, the system bomb appears in the form of a blank rectangular box in the
middle of the screen with no error code or message. However, a couple of users
have noticed the System Error 12 appear then disappear. (System Error 12 means
that an unimplemented trap was executed.)

We have been working with 3COM for the last two months on this and have
determined that our LAN configuration is sound and that all our hardware and
firmware is up to specifications. The problem seems to point to the EtherTalk
driver, which was written by Apple.

Correlations

The problem seems to be correlated to the amount of Ethernet traffic on our
LAN. During an experiment, I placed an Ethernet bridge between an entire floor
that was experiencing the problem, effectively reducing traffic and eliminating
the system bombs. Also, during extremely high traffic periods, we noticed that
the Macintoshes were experiencing the bombs more frequently.

A Macintosh connected to our network via AppleTalk to a Kinetics FastPath does
not experience the system bombs. However, as soon as I connect it to the

Ethernet and activate the EtherTalk driver in the Control Panel, the Macintosh begins to experience the system bombs.

DISCUSSION --

This is a known problem that tends to surface on networks with high traffic levels. It is due to an incompatibility between the revision A and revision B 3COM EtherLink/NB cards and EtherTalk 1.2 or newer. Just as Apple has released revisions to the EtherTalk NB Card, 3COM has released revisions to their EtherLink/NB cards. The most current is revision L, which works with EtherTalk drivers through version 2.0.1. Contact 3COM for details on their EtherLink/NB card upgrade program.

Something else to note is that the latest version of 3+Share is 1.5. 3COM technical support stated that version 1.3.1 shouldn't be causing any problems in your installation, but that there are enhancements in version 1.5 worth looking into.

For more details, search the Technical Info library under "3COM."

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