A/UX: Ethernet Input Errors (9/94)

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TOPIC ---

I seem to have a high number of input errors on two Macintosh computers running
A/UX on ethernet. This number increases all the time.

For instance, today:

Mac1:

Name	Mtu	Network	Address	Ipkts	Ierrs	Opkts	Oerrs	Coll
ae0	1500	nta-ring	bic	2003687	2398	461618	0	0
lo0	1536	loopback-ne	loop	20802	0	20802	0	0

Mac2:

Name	Mtu	Network	Address	Ipkts	Ierrs	Opkts	Oerrs	Coll
ae0	1500	nta-ring	cm	2126045	2350	547482	0	0
lo0	1536	loopback-ne	loop	18989	0	18989	0	0

Is this normal, or do we have a problem?

DISCUSSION ---

The following input errors are reported as "Ierrs" by netstat:

- receive CRC errors

- frame alignment errors

- fifo overflows

- missed packet errors

One or all of these errors could be causing netstat to report the Ierrs.
Unfortunately, all of these errors are summed together to create a global input
error counter for each interface. This counter is what netstat is reporting to
you.

As you probably already guessed, there is no program to separate the error counters for each type of input error. Without such a tool, we have little idea of what is causing the problem.

You are seeing about a 1% hit on inbound traffic. This is fairly high, but not necessarily a cause for alarm. Higher-level protocols usually take care of problems encountered in any lower layers. The problem won't be seen or felt by the user unless it is a serious enough problem to cause degradation or loss of services. You should monitor this situation, but until you can determine exactly what errors are being reported, all we can do is guess at what the problem might be.

If it's only the A/UX systems that are experiencing these errors, you can probably eliminate the physical network as the problem. Since this is a very busy network, you're probably seeing a few missed packets, and there are probably a fair amount of collisions on this Ethernet, which we suspect are frame alignment errors on the receive. All of these, with an occasional CRC error, could cause the number of errors you're seeing. It really depends on the environment and amount of traffic on the Ethernet as to how many errors will be reported as input errors.

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