Network Performance and Statistics

This article last reviewed: 7 April 1989

A user, curious about network performance, put TrafficWatch on a PhoneNET network consisting of 18 Macintoshes, several LaserWriters, a Kinetics FastPath 4, and a MicroVAX running AlisaShare. Some typical statistics (with a sampling period of 15 minutes) are as follows:

```
Total Packets:16451
Timeouts:39
Overruns:12
CRC Errors:0
Length Errors:39

Total Packets:13030
Timeouts:35
Overruns:8
CRC Errors:0
Length Errors:33

Total Packets:16017
Timeouts:28
Overruns:14
CRC Errors:0
Length Errors:29

Total Packets:40672
Timeouts:103
Overruns:43
CRC Errors:1
Length Errors:98

Total Packets:50355
Timeouts:304
Overruns:37
CRC Errors:0
Length Errors:310

Total Packets:33312
Timeouts:78
Overruns:24
CRC Errors:1
```

Length Errors:77

To date, no rule-of-thumb indications for good or bad network performance have emerged. In general, network engineers consider ratios to be less important than individual categories.

In fact, their recent tests yielded results comparable to those given here. Typically, CRC errors were low or zero. Other types of errors seemed to vary in proportion, depending on the type of network traffic and the specific network.

The worst case in the sample above is a little more than a 1 percent error rate. In most of the samples, you were closer to 0.5 percent. This is certainly acceptable for a network with the number of machines in this example--18 Macintoshes, several LaserWriters, and a FastPath on a single network and zone. This is close to the size that calls for breaking up the network by adding bridges. As you add devices or see increased network use (in its current configuration), the error rate would likely increase.

Keywords: <None>

==========

19960215 11:05:19.00
Tech Info Library Article Number: 3736