Network Troubleshooting: Symptoms & Causes (4/94)

Article Created: May 16, 1991
Article Reviewed/Updated: 13 April 1994

TOPIC ---

Troubleshooting a network can be much more difficult than troubleshooting a
single piece of equipment. This is because many devices might be involved.
Because of this, you should use a systematic approach to isolating and resolving
the problem.

DISCUSSION --

Below is a list of possible symptom/cures to be referenced when troubleshooting
network problems. The list is based on LocalTalk, Ethernet, Token Ring, and
Star networks--but can be adapted to other topologies. If you are a service
provider, additional information can be found in Apple Technical Procedures. In
addition, there are other articles in the Tech Info Library that may assist
you.

Missing Device Problems

Symptoms:
  Can't access file server.
  Can't access printer.
  Can't access another zone on the network.
  Can't access another network.

Possible causes:
  Break in connector.
  Broken or damaged pins on connector box.
  Device turned off.
  Cables severed or damaged.
  Disconnected cable extenders.
  Network interface card damaged, missing, or not installed properly.
  System software versions not consistent across the network.
  Incorrect printer or other device drivers.
  Appropriate cdev and/or adev missing or not in System folder.

  Token Ring:
    MAU not connected.
    Bad MAU port.
    Ring In/Ring Out bad or not connected.

```
   STAR:
     Star Controller turned off, not plugged in or is malfunctioning.
     Wires not punched down or punched down correctly.
     Punchdown block not connected to Star Controller.


Ghosting Problems
-----------------
Symptoms:
  Network device appears and disappears in the Chooser.

Possible causes:
  Loose connector.
  Damaged or obstructed cable.
  Improper termination.
  Loose cable extenders.
  Maximum cable length exceeded (check user manual).
  Maximum number of nodes exceeded.
  Electro-magnetic interference.
  Network not designed properly.


Performance Degradation
-----------------------
Symptoms:
  Slow printing
  Slow file transfer
  Network appears to be dead.

Possible causes:
  Maximum number of nodes exceeded.
  Excessive traffic.
  System software versions not consistent across the network.
  Virus.


File Folder Access
------------------
Symptoms:
  Can't see files or folders.
  Can't open files or folders.
  Can't drop files or folders into drop folder.
  Can't change file or folder name.
  Can't move file or folder.

Possible causes:
  Access privileges set incorrectly.
  Files or folders locked.

Article Change History:
13 Apr 1994 - Reviewed for technical accuracy.
```

Keywords: knts

===

This information is from the Apple Technical Information Library.

19960215 11:05:19.00

Tech Info Library Article Number: 7084