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Network Server 500 & 700: Hard Drive Troubleshooting (2/96)

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TOPIC -----

This article provides hard drive troubleshooting steps for your Network Server 500 or Network Server 700.

DISCUSSION -----

Symptom: Single internal hard drive in front drive bay doesn't operate; drive doesn't spin

Step 1

Verify that hard drive tray is completely inserted in the front drive bay.

Step 2

Verify that server is recognizing the drive on SCSI bus.

Step 3

Verify that installed SCSI devices and PCI cards are not exceeding maximum power allowance. This may affect operation of installed devices.

Step 4

Run Network Server Diagnostic Utility and follow the instructions provided with the utility to verify core system operations.

Step 5

Move the hard drive to another front drive bay slot.

Step 6

Verify that hard drive SCSI cable, SCSI ID cable, LED cable, and power cable are properly connected.

Step 7

Replace hard drive power cable.

Step 8

Replace hard drive SCSI cable.

Step 9

Replace hard drive SCSI ID cable.

Step 10

Replace hard drive.

Step 11

Replace SCSI backplane interconnect board.

Symptom: Single internal hard drive in the rear drive bracket doesn't operate;
drive doesn't spin

NOTE: This procedure applies only to Network Server 700/150.

Step 1

Verify that server is recognizing the internal rear hard drive on SCSI bus.

Step 2

Verify that installed SCSI devices and PCI cards are not exceeding maximum power allowance. This may affect operation of installed devices.

Step 3

Run Network Server Diagnostic Utility and follow the instructions provided with the utility to verify core system operations.

Step 4

Verify that internal rear hard drive SCSI cable, SCSI ID cable, and power cable are properly connected.

Step 5

Verify that the last bracket-mounted drive on the SCSI cable has termination enabled.

Step 6

If the rear drive bracket contains just one hard drive, verify that it is connected to the last connector on the SCSI cable.

Step 7

If the rear drive bracket contains two hard drives, verify that the SCSI ID cable and the last connector on the SCSI cable are both connected to the bottom hard drive.

Step 8

Verify that power backplane-to-SCSI backplane cable is properly connected.

Step 9

Verify that 10-inch and 20-inch mezzanine-to-SCSI backplane cables are properly connected.

Step 10

Replace rear drive power cable.

Step 11

Replace rear drive SCSI cable.

Step 12

Replace rear drive SCSI ID cable.

Step 13

Replace 10-inch and 20-inch mezzanine-to-SCSI backplane cables.

Step 14

Replace SCSI backplane interconnect board.

Step 15

Replace hard drive. (Refer to "Setting Up the Network Server" for information on installing disk drives.)

Symptom: No internal hard drive in front drive bay operates

Step 1

Verify that all hard drive trays are completely inserted in their respective front drive bay.

Step 2

Verify that server is recognizing the hard drives in the front drive bays on SCSI bus.

Step 3

Verify that installed SCSI devices and PCI cards are not exceeding maximum power allowance. This may affect operation of installed devices.

Step 4

Run Network Server Diagnostic Utility and follow the instructions provided with the utility to verify core system operations.

Step 5

Verify that power backplane-to-SCSI backplane cable is properly connected.

Step 6

Verify that 10-inch and 20-inch mezzanine-to-SCSI backplane cables are properly connected.

Step 7

Replace 10-inch and 20-inch mezzanine-to-SCSI backplane cables.

Step 8

Replace power backplane-to-SCSI backplane power cable.

Step 9

Replace SCSI backplane interconnect board.

Step 10

Replace powerplane interconnect board.

Step 11

Replace logic board. Retain customer's DIMMs.

Step 12

Replace processor card.

Symptom: No internal hard drives in the rear drive bracket operate

Note: This procedure applies only to Network Server 700/150.

Step 1

Verify that internal hard drives in the rear drive bracket do not have duplicate SCSI device addresses.

Step 2

Verify that server is recognizing the internal rear hard drives on SCSI bus.

Step 3

Verify that installed SCSI devices and PCI cards are not exceeding maximum power allowance. This may affect operation of installed devices.

Step 4

Run Network Server Diagnostic Utility and follow the instructions provided with the utility to verify core system operations.

Step 5

Verify that rear drives SCSI cable, SCSI ID cable, and power cable are properly connected.

Step 6

Verify that the last bracket-mounted drive on the SCSI cable has termination enabled.

Step 7

Verify that the SCSI ID cable and the last connector on the SCSI cable are both connected to the bottom hard drive.

Step 8

Verify that power backplane-to-SCSI backplane cable is properly connected.

Step 9

Verify that 10-inch and 20-inch mezzanine-to-SCSI backplane cables are properly connected.

Step 10

Replace rear drives SCSI cable.

Step 11

Replace rear drives SCSI ID cable.

Step 12

Replace rear drives power cable.

Step 13

Replace 10-inch and 20-inch mezzanine-to-SCSI backplane cables.

Step 14

Replace SCSI backplane interconnect board.

Step 15

Replace power backplane-to-SCSI backplane power cable.

Step 16

Replace powerplane interconnect board.

Step 17

Replace logic board. Retain customer's DIMMs.

Step 18

Replace processor card.

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