ASK DR. ALBERT

Q.

I am installing the Altos 150 Mb Tape upgrade onto my Series 2000, but I did not get the software to use it. When I try to use it now, I get a Tape Not Ready error. How do I get the software?

A.

There is no software when a Tape drive is installed. The operating system detects a SCSI device and uses it. Your problem is either incorrect installation or a defective drive. Recheck your installation.

Q.

When reading the dump hd script on my 1086, I notice it backs up /dev/rhd0b. Shouldn't it back up /dev/rhd0a to get the entire disk?

A.

No. /dev/rhd0a would back up the drive configuration and bad sector information. If your hard disk developed a bad sector or if the drive had to be replaced, you would not want the bad sectors to be restored onto the drive from the backup. Or if you replaced the drive with a drive with different heads and cylinders, it would not work.

Q.

I purchased a 686 without a tape drive when they were available and discovered later that I could not add a tape drive to it. Now I'm looking at the Series 500 and they list a model without a tape. Is the same thing going to happen on this model?

A.

No. The controller board on the 686 was the drawback. If ordered without tape, the circuit for the tape was left off of the board. On the Series 500, it has AT compatible slots, so the Tape Controller is a separate board that can just be plugged into any available slot.

EDITORIAL COMMENTS

How committed are you to customer satisfaction? I have always taken this area very seriously and thought that some of this experience may be worth sharing. First off, I will concede that I have been blessed with circumstances that allow me to go to the extreme, and I have fully utilized these opportunities. The pricing levels that I have operated with have included adequate profit levels to insure that the end user got the support he needed, not what he thought he needed. This can be a very big difference.

When I dealt with end users, I committed very substantial amounts of effort to insuring the installations were successful. If I errored on hardware selection, we "ate the loss" and got the customer into the right system. If the software didn't do what they needed, we rewrote it so it did. Sometimes this had a severely detrimental effect on profit, but we were committed.

When we established our current business to serve dealer needs, we attempted to bring the same commitment with us. Our sales terms are convenient, our warranty is the best in the business, and our tech support is really exceptional. Sometimes the commitment affects our profitability, but we aren't tempted to change. This week we flew our best technical support person to the east coast to straighten out a pin that one of our customers bent. Normally, I would be tempted to worry about the $2,000 expense and the resultant loss on the sale, but we have an old Iowa saying that comforts me during these times - "Sometimes you eat bear, and sometimes the bear eats you."

We really do not feel that we have a choice in taking care of our customers. The first end users I ever sold in the computer business still buy expansions, additions, and replacements from us. I really don't believe we have lost any of our customers because we didn't stand behind our products. Some may have left because they don't like me - but most stay for the support in spite of me. I still believe you can earn a customer's loyalty - it just isn't easy.

As the Unix market expands (witness the recent entry of Computerland and others), the market niche will become much more competitive. We will all have to face the question of how much value we add to the products we sell. I don't think that this will be measured by promises we are willing to make - but by promises we have kept, and I am pretty comfortable with our position there.

THIS ISSUE

THE SOFTWARE EXCHANGE

Update on AdLANtes

We have just received AdLANtes from one of our distributors (we are still waiting for the fine folks at Altos to call us and let us know when the product will be available). We do not yet have the system assembled and running, so the review will be postponed until next month. Apparently, distributors now are stocking the complete AdLANtes product. We have been informed that the Series 2000 server board will NOT work with currently available TCU's in a multidrop configuration. This capability will require an updated ROM in the TCU to be available from Altos at some (unspecified) future date.

Series 500: First Impressions

The Altos Series 500 seems to be a thoroughly competent and price competitive piece of hardware. There were no major problems getting it up and running under either Altos System V or SCO XENIX. Altos is currently including Altos System V at no Extra charge with each 500 purchased, which gives it a definite price advantage over other systems for which a generic Unix (e.g. SCO or Microport) must be purchased.

It would be nice to see Altos follow the lead of SCO and provide a support for a wider range of peripherals (particularly hard disks, controllers, and intelligent serial cards). The current limitation of 8 users under Altos V can also be a severe handicap when competing with SCO systems running 16 or 24 users. Even customers who do not currently need that many users like·to see that there is an upgrade path available for them. No one likes to buy a "dead end" piece of hardware.

System V Print Spooling

Altos System V print spooling allows a single printer to be configured under several different names, each with different attributes. The example given below demonstrates a possible setup for an Epson LQ printer. By using different destination names, the user can select a draft or letter quality output, number of lines on an 11 inch page, and the style of printing (standard, compressed or expanded). There are no restrictions on the names to be used for the printers, but it is usually best to use names which reflect either the print attributes used, or the ultimate purpose for which the printer is intended.

For the example, we use the following format for printer names:

Character 1:	"d" if printer is used in draft mode
	"h" if printer is used in high-quality mode
Characters 2-3:	"66" for 66 lines per page
	"88" for 88 lines per page
Characters 4-last:	"std" for standard print
	"comp" for compressed print
	"exp" for expanded print

Thus, there are twelve logical names associated with the one physical device.

For example, the command

```
lp -dh88comp /etc/passwd
```

would print the password file at 8 lines per inch, in high-quality, compressed print.

To set up the required files for this configuration, the following steps should be followed:

1. Set up each printer using the "lpinit" program (you must specify the port to which the printer is attached, the printer model, and whether or not this is to be the default printer.

   You should generally choose a printer model which is as close as possible to the one desired, and then make any necessary modifications. For this example, we use the model "dumb" (no special printer attributes).

2. Modify the interface files. These reside in directory /usr /spool/lp/interface. Generally, you will only need to modify the intialization data. The contents of the twelve interface files used in the example are shown below.

It should be noted that there are no restrictions on the manipulations which can be performed in the interface file. Possible applications would be converting numeric data to a graph, multi-column print, etc.

Let me know what applications you develop using interface files. Those of general application will be published in this column.

d66comp
```
#    Epson LQ printer interface file (d66comp):
#      Draft mode, 66 lines per page, compressed mode
#
printer='basename $0'
request=$1
name=$2
title=$3
copies=$4
options=$5
shift; shift; shift; shift; shift
stty ixon ixoff 0<&1

# send the file(s) to the standard out $copies times
while   [ "$copies" -gt 0 ]
do
        for file
        do
                echo -n "\0330\033\062\033x0\033\017"
                cat "$file" 2>&1
                echo "\f\c"
        done
        copies='expr $copies - 1'
done
exit 0
```

d66exp
```
#    Epson LQ printer interface program (d66exp):
#      Draft mode, 66 lines per page, expanded
#
printer='basename $0'
request=$1
name=$2
title=$3
copies=$4
options=$5
shift; shift; shift; shift; shift
stty ixon ixoff 0<&1

# send the file(s) to the standard out $copies times
while   [ "$copies" -gt 0 ]
do
        for file
        do
                echo -n "\0330\033\062\033x0\033W1"
                cat "$file" 2>&1
                echo "\f\c"
        done
        copies='expr $copies - 1'
done
exit 0
```

d66std
```
#    Epson LQ printer interface program (d66std):
#      Draft mode, 66 lines per page, standard print
#
printer='basename $0'
request=$1
name=$2
title=$3
copies=$4
options=$5
shift; shift; shift; shift; shift
stty ixon ixoff 0<&1

# send the file(s) to the standard out $copies times
while   [ "$copies" -gt 0 ]
do
        for file
        do
                echo -n "\0330\033\062\033x0"
                cat "$file" 2>&1
                echo "\f\c"
        done
        copies='expr $copies - 1'
done
exit 0
```

Free Classifieds   Free Classifieds   Free Classifieds   Free Classifieds

With this issue Altogether welcomes the Altos dealer base in Canada. Total circulation now exceeds 1100 dealers in North America. If you have a product or service that could be marketed to or thru these experienced UNIX resellers — consider reaching them with an ad or insert in the Altogether.

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FOR SALE: Used Altos 1086, XENIX Ver 3.4, 60 mg tape drive, floppy drive, (1) 80 mg and (1) 50 mg hard disks, 10 serial ports, one mg memory, only $7200. Call Dion Wixted, (203) 743-5710. 11/88.

ANNOUNCING: The first construction management software developed with fourth-generation technology. FOREFRONT is a fully integrated package which includes: Job Cost, Estimating, Accounts Payable/Subcontract Management, Accounts Receivable/AIA and Subcontract Billing, Payroll, General Ledger and Custom Report Writer. All are specifically designed for the construction industry; General, heavy and specialty contractors and home builders. It is written in PRO-IV, a fourth generation language from McDonnell-Douglas, which has the flexibility to allow you to make custom modifications in a fraction of the time and cost of what is required in a "third generation" system - without paying extra for source code. FOREFRONT is operating system independent, so it runs on DOS, Unix, XENIX or Vax-VMS systems. Call Sandy Hearn at Dexter and Chaney, Inc. (206) 632-3750. 12/88.

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WANTED: APPGEN Programmer to do Software Modification. M & M Computers, (806) 744-4992.

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FOR SALE: Altos 486 20 Mb, $1500. New Demo unit. XENIX and Qume 102 included. Call Malcolm (805) 656-3791.

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WANTED: Used 1086 or 2086 in good condition. Ph. 1-800-327-3786.

WANTED: Business accounting software written in Informix (GL, AR, AP, SO, etc.). Will be running on Altos 1086 or Series 2000. Contact Gerald Wolff at M-Tron. (605) 665-9321, ext. 138.

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CLASSIFIEDS FREE!!

d88comp

```
# Epson LQ printer interface file (d88comp):
#    Draft mode, 88 lines per page, compressed mode
#
printer='basename $0'
request=$1
name=$2
title=$3
copies=$4
options=$5
shift; shift; shift; shift; shift
stty ixon ixoff 0<&1
# send the file(s) to the standard out $copies times
while    [ "$copies" -gt 0 ]
do
        for file
        do
                echo -n "\0330\033\060\033x0\033\017"
                cat "$file" 2>&1
                echo "\f\c"
        done
        copies='expr $copies - 1'
done
exit 0
```

d88exp

```
# Epson LQ printer interface program (d88exp):
#  Draft mode, 88 lines per page, expanded
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printer='basename $0'
request=$1
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shift; shift; shift; shift; shift
stty ixon ixoff 0<&1

# send the file(s) to the standard out $copies times
while    [ "$copies" -gt 0 ]
do
        for file
        do
                echo -n "\0330\033\060\033x0\033W1"
                cat "$file" 2>&1
                echo "\f\c"
        done
        copies='expr $copies - 1'
done
exit 0
```

d88std

```
# Epson LQ printer interface program (d88std):
#    Draft mode, 88 lines per page, standard print
#
printer='basename $0'
request=$1
name=$2
title=$3
copies=$4
options=$5
shift; shift; shift; shift; shift
stty ixon ixoff 0<&1

# send the file(s) to the standard out $copies times
while    [ "$copies" -gt 0 ]
do
        for file
        do
                echo -n "\0330\033\060\033x0"
                cat "$file" 2>&1
                echo "\f\c"
        done
        copies='expr $copies - 1'
done
exit 0
```

h66comp

```
# Epson LQ printer interface file (h66comp):
#    Letter Quality mode, 66 lines per page, compressed mode
#
printer='basename $0'
request=$1
name=$2
title=$3
copies=$4
options=$5
shift; shift; shift; shift; shift
stty ixon ixoff 0<&1

# send the file(s) to the standard out $copies times
while    [ "$copies" -gt 0 ]
do
        for file
        do
                echo -n "\0330\033\062\033x1\033\017"
                cat "$file" 2>&1
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options=$5
shift; shift; shift; shift; shift
stty ixon ixoff 0<&1
```

```
# send the file(s) to the standard out $copies times
while    [ "$copies" -gt 0 ]
do
        for file
        do
                echo -n "\0330\033\062\033x1\c"
                cat "$file" 2>&1
                echo "\f\c"
        done
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                cat "$file" 2>&1
                echo "\f\c"
        done
        copies='expr $copies - 1'
done
exit 0
```

THANKSGIVING
Things to be thankful for this year!

First — our memory board specials have been extended.

Computer	Board Size	Altos Parts List	Special Cost
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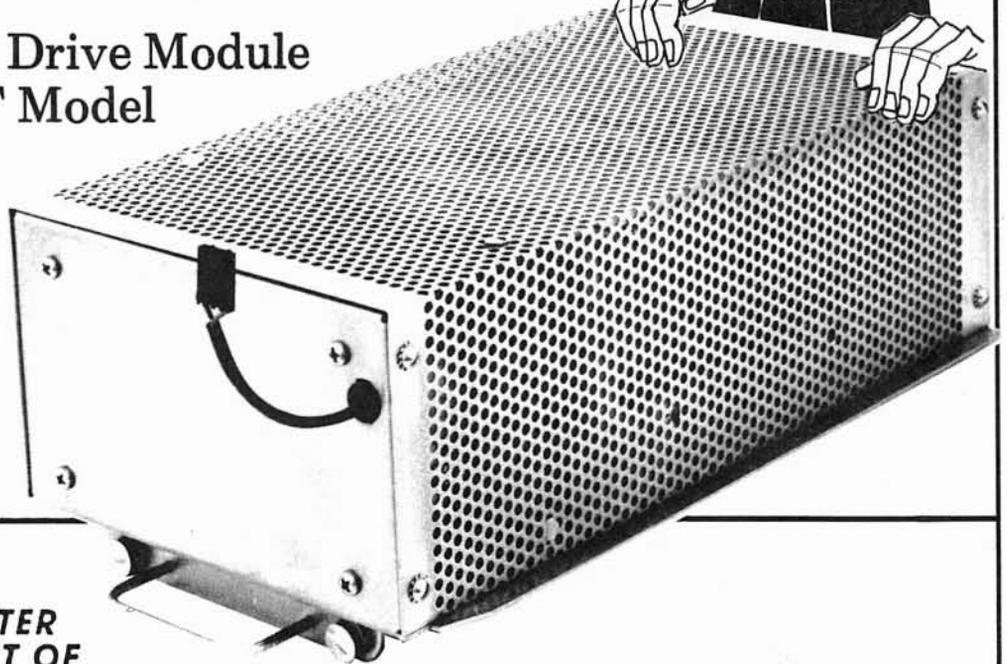
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