

ATTR Syntax: Attr filename [permissions] Usage : Examine or change the security permissions of a file Opts: -perm = turn off specified permission perm= turn on specified permission -a =

inhibit  
s - no  
to own  
pw -  
Syntax  
one de  
single  
Basic0  
filenam  
CHD S  
specifi

# AUSTRALIAN OS9 NEWSLETTER

perms : d - directory file  
to owner w - write permit  
r - read permit to public  
te permit to public BACKUP  
age : Copies all data from  
ead error occurs s =  
writes BASIC09 Syntax :  
ge BUILD Syntax: Build  
s from standard input  
age working directory to  
> Usage: Change execution

directory to specified path Cmp syntax Cmp  
Usage : File comparison utility CDBLER Syntax: Cobble devname  
Usage : Creates OS-9 bootstrap file from current boot CONFIG  
Syntax Config Usage: Create system boots and system disks COPY  
Syntax  
one file  
Date [t  
specify  
: Check  
for wor  
= save  
cluster  
print  
{<devn  
filenam  
delete  
directo  
[e] [x]  
names  
executi

EDITOR :  
Gordon Bentzen  
8 Odin Street  
SUNNYBANK Qld 4109  
  
(07) 345-5141

filename1 filename2  
Syntax: Cobbler devname  
Usage : Creates OS-9 bootstrap file from current boot CONFIG  
Syntax Config Usage: Create system boots and system disks COPY  
data from  
E Syntax :  
Opts: t =  
ame> Usage  
directory  
sters -m  
of unused  
nly -o =  
<devname>  
Del [-x]  
s; -x =  
at Deldir  
Syntax: Dir  
the file  
y x=print  
Usage :

Display s converted characters to standard output DSAVE Syntax  
: Dsave [-opts] [dev] [pathname] Usage : Generates procedure file  
to copy all files in a directory system Opts : -b make a system  
disk by using OS9boot if present -b=<path> = make system disk  
using path as source i = indent for directory levels -l do not  
process b  
command  
ECHO Syn  
output ED  
text edito

AUGUST 1990

do not  
makdir  
o num K  
standard  
oriented  
text

error message for given error numbers M Syntax: m <modname>  
Usage: Chain to the given module FOKMAL Syntax: Format  
<devname> Usage : Initializes an OS-9 diskette Opts ; R - Ready L  
- Logical format only "disk name" 1/2 number of sides 'No of

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**AUSTRALIAN OS9 NEWSLETTER**  
**Newsletter of the National OS9 User Group**  
**Volume 4 Number 7**

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**EDITOR** : Gordon Bentzen

**SUBEDITORS** : Bob Devries and Don Berrie

**SUPPORT** : Brisbane OS9 Level 2 Users Group.



Who said that OS9 was dead?

This edition brings us our second anniversary of the newsletter from sunny Queensland and continues the tradition of sharing knowledge amongst OS9'ers. I must admit that we had some reservations, over two years ago, about how we were going to fill the first newsletter with articles of interest. Well here we are after two years with more and more material to present, and seemingly no end to new programmes, utilities and system modifications.

OS9 lives on in spite of the many new offerings and improvements to other operating systems, and the growing number of computers which claim more power, more speed and more support than ever before.

The CoCo lives on despite these improvements and in spite of the decision by Tandy to promote their MS-DOS machines. Tandy no doubt expected that CoCo users would "upgrade" to their MS-DOS based offerings. It may be that some CoCo users did go to MS-DOS but I would be willing to bet that not many spent their DOS dollars at Tandy.

Now who has decided to make an investment in the new so called CoCo 4's? Will your choice be the Tom Cat from Frank Hogg, or the #M1 from Kenneth Leigh Enterprises?

These machines may be just what is needed to get OS9 off the ground as the operating system for the personal computers of the future. Most of the major manufacturers, including the "Big Blue", are certainly trying to include the multitasking and multiuser features of OS9 and UNIX in newer operating systems.

We do believe that OS9 has a bright future even though the release of two or three new OS9

platforms will hardly have IBM shaking in their boots. The new machines will add to the many other 680XX based computers already on the market and encourage programmers to further support OS9.

All this preamble is designed to convince you that you should renew your subscription to the National OS9 User Group and to encourage others to join and to become involved in this fascinating operating system.

Many existing members have already re-subscribed, and we thank you for your continued support. We continue to receive enquiries from new users of OS9 and we have discussed the probable need for a more professional presentation of the newsletter.

Input from each member would no doubt greatly assist us in this aim, and your comment or contribution would be greatly appreciated.

Subscription rates remain unchanged at \$18.00 for twelve months, September 1990 to August 1991. This membership subscription includes 11 issues of the Australian OS9 Newsletter, mailed to your address, plus access to the public domain library. (The editorial of July 1990 gives details of the procedure for obtaining PD software.)

**DECISIONS, DECISIONS.** The majority of OS9'ers will be faced with making decisions, at some time in the future, between 6809 OS9 Level 2 (no longer supported by Microware), 68K OS9, and what computer is best for the budget.

Whatever decisions are made, we hope that you stay with OS9.

Cheers, Gordon.

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## AUSTRALIAN OS9 NEWSLETTER

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### Shell-scripts and the Menu programme. by Bob Devries

I guess that we all use Shell-scripts, otherwise known as procedure files, fairly frequently when using our OS9 system. Sure you do! The 'Startup' file is just one example. Just about every software package sold by Tandy has some form of Shell-script to start it up. Well, I will write about the use of Shell-scripts, and in particular, one of the programmes from the 31 disks from the European Library, called Menu. This programme is a great help when you want to set up a Shell-script to make available a number of programmes together. Consider the following Shell-script, for example.

```
display lb 22 1 18 8 11 c 0 4
display lb 25 1 1 0f 0a
load echo menu
*start
display c
display lf 22
echo Comms Menu
display lf 23 0a
echo 0. Quit
echo 1. OSTerm
echo 2. JTerm
echo 3. XCom9
echo 4. Baud Rate
menu -? Your Choice
menu =0
goto wend
menu =1
goto +ost
menu =2
goto +jtrm
menu =3
goto +xc9
menu =4
goto +baud
menu =*
goto start
menu --
goto end
*ost
```

```
display lb 23;chd /h0/sys;osterm <>>>/1
goto end
*jtrm
display lb 23;chd /h0/sys;jterm <>>>/1
goto end
*xc9
display lb 23;xcom9 /t2 <>>>/1
goto end
*baud
display c lf 22
echo Baud Rates
display lf 23
echo 1. 300
echo 2. 600
echo 3. 1200
echo 4. 2400
echo 5. 4800
echo 6. 9600
echo 7. 19200
menu -? Which
menu =1
xmode /t2 baud=01
menu =2
xmode /t2 baud=02
menu =3
xmode /t2 baud=03
menu =4
xmode /t2 baud=04
menu =5
xmode /t2 baud=05
menu =6
xmode /t2 baud=06
menu =7
xmode /t2 baud=07
menu =*
goto baud
menu --
goto start
*wend
display lb 23
*end
unlink menu echo
```

This is the Shell-script I use to allow a selection of communication programmes. First, it opens an overlay window, resets its working area and loads two programmes for its use. One of these programmes is 'menu'. Menu has a number of possible parameter combinations:-

```
menu -? [prompt] outputs a prompt and reads an input from the keyboard.
menu =X becomes an if...then line, where X is one of the possible options.
```

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## AUSTRALIAN OS9 NEWSLETTER

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menu -\* special case of if, when no valid selection is made, like 'else'.  
menu -- equivalent to the endif statement.

As you can see, I first printed in my overlay a list of the selections available, with a number beside each. Then I used the menu -? with the prompt 'Your Choice'. Note that no question mark is used, as menu will place that on the next line itself. Next, I did a series of if...then versions of the menu command. After each command I used a goto statement. The goto statement is also provided in the same archive as menu, for those who are not yet using Shellplus version 2.1, which has built-in goto and label functions.

Each of the selections closes the overlay window, changes the data directory, and starts up the comms programme which I chose, with its input, output, and error paths redirected to /1. That is each except the baud rate selection, which clears the screen (of the overlay) and presents a selection of baud rates which can be used to set up the speed of the /T2 serial port. When a choice is made, the if...then statements will do the xmode /T2 baud=XX for me, which saves typing it on the command line beforehand. When that selection is done, the Shell-script returns

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### INTRODUCING THE MM/1

In the April edition of the newsletter we included an article on one of the proposed new generation of OS9/K computers, the Tomcat, by Frank Hogg Laboratories. This issue, we will introduce to another contender in the OS9/K stakes, the MM/1 produced by Interactive Media Systems (IMS).

The MM/1 is a 68000 (in its simplest form) based computer that has been designed from the ground up as a vehicle for, amongst other things, Compact Disk - Interactive (CD-I). This system is also known as multimedia (ie video, sound and processing) and hence the name MM/1.

Much hype in the electronic media has surrounded the release of this machine, and those of you who have any contact with the US OS9 community will surely have heard of its release by now. The following article is a transcript of an electronic conference that was held in the US on their CIS (CompuServ) network.

Informal transcript of an Electronic Conference (on the US CompuServ Information System) on 25 July 1990, with Paul Ward of IMS, the company making the MM/1. Steve Wegert was moderator. The transcript has been heavily edited to place comments and remarks next to their relevant questions, remove duplicates, correct misspellings; and add/delete miscellaneous comments. Passages enclosed with

to the label 'start', and re-presents the comms programme selections.

You'll notice that after each of the comms programme selections, there is a statement 'goto end'. That is necessary, because the Shell-script keeps running even when the main comms programme is going, and when the comms programme is finished, control returns to it.

One small note here. You'll find some of the goto commands have the '+' in front of the label name. Those are there so that the label will be looked for from that point on, and not from the beginning of the Shell-script.

Well, I hope that this little snippet has whet your appetite for more programme descriptions, and, indeed for the software itself. I will be discussing more useful programmes from the European library in the coming issues.

Bob Devries

square brackets (ie [...]), represent editorial changes.

Some of the attendees were:

John Baer	Kevin Darling	John Dickey
Ed Gresick	Mike Haaland	Stephen Hamilton
Frank Hogg	James Jones	Pete Lyall
Dan Robins	Phil Scherer	Mark Siegeliegel

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## AUSTRALIAN OS9 NEWSLETTER

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Jerry Stratton Zack Sessions John Wainwright  
Paul Ward Carl Waters Steve Wegert  
Bob Wilkinson Brett Wynkoop

MM/1?

Paul Ward) Good question. Can't announce yet.

Steve Wegert) [Intro of Paul as the "man behind the folks behind the MM/1"]

Mark Siegel) Ok thanks.

Steve Wegert) And with that I'll turn the floor over to Paul. Go Paul!

Brett Wynkoop) Are you planning on a portable version?

Paul Ward) Thanks Steve. First .. I'm not sure if I'm the man behind the folks bringing the MM/1, or if they are behind ME, pushing me into the fray! Grin. Questions?

Paul Ward) We're looking at two different ways to do a portable MM/1. They are different philosophically.

Phil Scherer) [Your ads say that] MM1 runs 1000s of MSDOS stuff... which ones will and which won't??

Phil Scherer) If I see "xyz" DOS program advertised, how can I tell if it'll run??

Paul Ward) Got a pencil? Grin. Ok... Here's what we're doing. I'm announcing here for the FIRST TIME the impending availability of QuickBASIC for OS-9. Now what that means is that, for every BASICA, MBASIC, and QuickBasic program you can find in source, you can compile and run it. ALSO ... Many key applications are WRITTEN in QuickBasic, and we are negotiating now with two such companies, one of which has a very nice accounting package, the other has a realtime lab work package. In any case, you can see that as LEAST you'll have free access to a large number of BASIC programs, and a smaller but increasing number of programs we're porting under QuickBasic.

Paul Ward) Good question! I can't tell all right now, but the way our DOS stuff works is that CERTAIN apps will run -- you'll see them in our catalog. They will at least include most of the Borland productivity thingies, like Sprint, Multimate, Quattro. We're looking into WordPerfect, dBase 3, and others, but no announcements there.

Dan Robins) Well...what I want is a box which is a graphics killer! So between the MM/1 and Frank's TC series...enlighten me as to my choices and what the MM/1 will be capable of.

Mark Siegel) So why should someone buy a MM/1 instead of a 386SX computer?

Paul Ward) Good question. I want to say up front that I am not getting into TC bashing here. BUT... First, the TC70 when it is available will have the same res modes as the MM/1 because it uses the same chip. It will not run as fast, tho, because the TC70 forces the video graphics mem and system mem as shared, so when you, for example, get our second board, you'll see a 50% increase in speed, from around 650 Dhrystones to about 950 Dhrystones. SO if all you need is resolution, either choice is appropriate. If you want speed, well, you get the idea.

Paul Ward) Good question. I think that for many users, a 386sx is a good choice. However, you probably know as well as I that there is a group of OS9 users for whom the lure of DOS applications (strong as it is) is insufficient to get them to move to even a 386. The reason lies with productivity, I think. Also, the buzzwords for the next decade WILL be multimedia, and the MM/1 provides a reasonably good multimedia platform at this price. Of course, multimedia is tricky, but I don't think the MM/1 is not up to giving most other PCs a run for their money for personal entertainment and some vertical apps.

Frank Hogg) Paul, your comment about the TC70 being 50% slower is NOT correct. It is the same as the MM/1.

Mark Siegel) What multimedia apps run on the

Paul Ward) First ... If the MM/1 can be 50% faster than the TC70, that makes the TC70 only 25% slower than the MM/1. You can use the 25% figure in your ads, grin ... and secondly, if I understand correctly... the VSC automatically inserts wait states into the CPU to allow it to

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## AUSTRALIAN OS9 NEWSLETTER

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grab video mem when it needs it. So in our setup, the two board system, which separates video from system memory, avoids these wait states. You know, maybe I should defer to Kev on this, as he knows more about your TC70 than I do. I don't want to comment on a machine I have not seen.

[Heated discussion between Paul Ward and Frank Hogg on the subject of the relative speeds of the MM/1 and the TC70]

Frank Hogg) Kev, ?

Kevin Darling) Sounds like Frank needs a CD too <grin>, but since he's here, let me ask: the memory expansion of the TC70 is offboard, right?

Frank Hogg) Yes, beyond the 1.5 meg.

Mark Siegel) Why don't you both agree on a benchmark and publish the numbers?

Kevin Darling) Ok. Does the offboard memory generate its own waitstates?

Frank Hogg) Yes.

Kevin Darling) Then I don't see why an expanded TC70 shouldn't be capable of speedup, also... altho it will also depend on [other things]. I'd say to take Mark's suggestion and do a benchmark.

Paul Ward) I think the best suggestion would be to agree on a benchmark and go with that, and stop speculating.

Frank Hogg) OK by me on the benchmark.

Paul Ward) Great!

Steve Wegert) Frank ... anything further on this ?

Frank Hogg) no.

James Jones) Thanks, Steve. <enter former math major mode> Slight arithmetic error: if X is 50% faster than Y, then Y is 33% slower. (Paul was right in principle, though! <grin>) <exit math major mode>...

Paul Ward) Dops. <Embarrassment> And I was a

math major, too!

James Jones) About those benchmarks--could we agree that they be compiled with similar options, and the modules with ident output be made available?)

Paul Ward) sure, sounds great!

Steve Wegert) Good thoughts, JJ. Ed .. your comment?

Ed Gresick) See message #5485 this forum to me from Kevin Pease (I believe the designer of the MM/1). Summarizing he states 'The TC70 should show very close to the same speed.'

James Jones) That's all from me, aside from canonical impatience waiting to buy! <g>

Kevin Darling) Sorry. I just realized where the [speed] confusion may have come from... See, on the MM/1 the cpu clock is separate... but I believe that on the TC70 they use the VSC-generated clock. Now, the VSC inserts wait states... but only (here's the key) for memory it controls... which is a 2meg area. In other words, I think tying in the VSC/cpu clock confused the issue.

Paul Ward) Thanks Kev.

Jerry Stratton) You mention a 32 bit bus in the latest Rainbow. What is it?

Paul Ward) Well, Jerry, we have a bus spec that most people would describe as a passive VME system. However, considering the also-ran nature of ANY bus that ain't EISA, ISA, MCA, or NuBus (Apple's or otherwise), we would be foolish to force our users to choose our bus with no options. So we'll be offering some VERY INTERESTING options. Can't announce THAT... but would you like a followup question on the bus, Jerry?

Jerry Stratton) Thanks, that covers that. Is the bus going to be available within a short time?

Paul Ward) We're looking at making it available in first quarter 1991. I have a question for Jerry -- what is the first thing you want on the bus?

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## AUSTRALIAN OS9 NEWSLETTER

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Jerry Stratton) We're looking at realtime video input. Is this covered elsewhere in the MM/1 specs?

Paul Ward) No, it is not. Drop me email after this conference. OK?

John Dickey) Two things... First, Desktop publishing.. any software ala pagemaker?

Paul Ward) Good question. DTP is EXPENSIVE to develop. We have a guy in our developer's group who has committed to one, but it will be a while before a good DTP will be there ... HOWEVER .. we are big on laser support and recently got HP scalable fonts, all of which will be available and USEFUL on the MM/1 for laser and other printers.

James Jones) About text formatting -- it's not WYSIWIG, but -- at least two folks have ported Knuth's TeX to OS-9/68000, and at least one has ported METAFONT. Those can generate some very good output.

John Dickey) Ok, the second is... I do a lot of applications development using the Sculptor [database program]... will it be ported over?

Paul Ward) I don't see that Sculptor won't be able to run on it out of the box [...] but be sure that you are not violating the software license agreement by [...] using one package on two CPUs, as that is illegal. next.

Brett Wynkoop) Sculptor already runs under OSK. Just expect to pay big \$\$.

Paul Ward) One comment... We are working on DOS database technology that will give us at IMS the ability to port of dozens of DOS apps in our sleep, so you may wish to keep developing in Sculptor until we announce our database environment. It'll benefit the users and the developers.

Pete Lyall) [Regarding] Ethernet & TCP/IP - where are you/the MM/1 on this?

FTP, Rlogin, and all the upper layer protocol stuff.

Paul Ward) Good question -- ethernet support will be available. It's a big part of our plans, and

of course it will use the internet protocol underneath. We're looking at Karn's SLIP, too. next question?

Pete Lyall) Well - that's really the question... DOES IMS have the hardware technology in hand?

Paul Ward) Yes and no -- mostly yes. I cannot reveal the details yet.

James Jones) OS-9/68K has ethernet, TCP/IP, and telnet. All IMS has to do is get [...] hardware and appropriate device drivers, speaking technically. (grin) (ftp too...oops)

Pete Lyall) Has a MIDI design been finalized, and is it "intelligent" (i.e. built in timers, buffers, etc.)?

Paul Ward) We have several things cooking on the MIDI side. Can't reveal ... but!! Just these last few days we have gotten some INCREDIBLE leads. Keep tuned.

Kevin Darling) Pete, as far as I know, the stock machine (barring anything new) will use a timer laid aside for that purpose... and the serial port should easily handle the input/output.

Phil Scherer) Any CAD??--The lack of cad in OS9 is a liability to "Whole company system installations".

Paul Ward) Actually, I assigned one person the job of talking to a leading CAD vendor about porting to OSK, and things are moving a little slow. I guess we should really do a little market research and find out what the process priority should be. Naturally, OSKers in general would like it, but how many can we sell, and at what price to offset the license fee?

Phil Scherer) Thanks Paul. It's nice to see somebody besides Tandy in our world!

Mark Siegel) What is the MM/1 warranty and who will service the product? And will all hardware and software be catalog only?

Paul Ward) First, the way we have it structured here, given our suppliers and our own capabilities, we will be offering AT LEAST 90 days parts and labor, but I think that since the

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## AUSTRALIAN OS9 NEWSLETTER

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MM/I has been INCREDIBLY stable, OSK port and all since last February, we may be able to substantially extend that warranty. We need to look into the total cost, as you know. And, in terms of direct sales [...] we are looking seriously at franchising, and have made substantive progress on both getting them on board and working out warranty repair stuff.

Mark Siegel) Thanks.

Pete Lyall) I'm not sure what Mark Siegel's slant on the warranty/service issue was, but we in CoCo land have been accustomed to little or no service for some time. The careers of the technicians in the service centers typically do not outlast the 90 day warranty. We have become a very self sustaining group, and even if IMS had no warrantee at all, I don't think most of us would feel too uncomfortable.

Steve Wegert) Good point Pete ... <my turn!> .. but let me add something here [...] for us serious hardware hacking types, your comments are too true. But if the MM/I hopes to survive, it has to attract the average user [...] and service availability is an issue there, in my opinion.

Paul Ward) May I jump in before Mark says something?!

Steve Wegert) Sure, Paul.

Paul Ward) I know from MANY HOURS of work that the Tandy warranty system is basically sound, considering the sheer VOLUME of stuff they have to attend to in a cost effective manner for them.

Second, Steve Wegert is right -- IMS has an eye to bigger ponds, where OSK can really grab the attention it deserves, and warranty has to be our middle name, the MM Warranty One.

Steve Wegert) Dan ..something to add?

Dan Robins) Yes ... simply to what Paul Ward has said [...] to add [...] that not all of us have had problems with Tandy service [...] and that really it shouldn't be an issue HERE, NOW [...] unless Tandy wants to service it [...] but what hasn't been answered with service is WHERE it will be done at.

Steve Wegert) Paul ... wanna grab that one?

Paul Ward) Good point! Dan. some of the details have yet to be worked out, but it is certainly true that two things need to be balanced. First, don't interrupt the use of the MM/I if you can avoid it [...] and service some parts at the franchise, others to be returned for replacement. The thing we're really selling is service so that folks will continue to come back. Our customers need to feel like they're king or queen or something.

Steve Wegert) Pete?

Pete Lyall) Well - I don't want to ignite a holy war, but I felt there was an implicit tilt to the question, inferring that perhaps Tandy was offering something that IMS might not be. All I was getting at was that what my experience had been, and that was that TRS service was not that great a deal. Perhaps I overreacted, but that's what I saw. Mark?

Steve Wegert) Mark ..want to set us straight?

Mark Siegel) Yah... last night my 2 week old Packard Bell vga monitor bit the dust, and if you think dealing with Tandy is a trip, try some of the competition. I'm a customer, too. And I'm concerned about the longevity of my investment.

Steve Wegert) Good points, all.

John Baer) two questions...

- 1) what IS the target date for release of the MM/I.
- 2) what about CDI?

Paul Ward) Excellent. Ok, target date IS January 1, 1985, which is when we REALLY needed the MM/I.

But, FCC takes its own sweet time and Mid September (1990) is the wisest announcement I can make. FCC is VERY important to us.

CD-I -- what is your particular question. What is it? What does it mean?

John Baer) Ok.. do you have anything in the works for CDI for the MM/I?

Paul Ward) Well, if I understand what you're driving at, we are talking to two CD-I companies about moving some of their tools and products over, the only challenge being that we are NOT a CD-I player with a keyboard, so some things will



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## AUSTRALIAN OS9 NEWSLETTER

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have to change. However, we have the horsepower to do this much more than the Amiga does with their CD-TV thingie. So you should see a few things coming out from us. It's not going to be an onslaught at first, though.

John Baer) About SCSI interface... IS it on the second board?

Paul Ward) Good question. To do SCSI you need three hardware thingies ... the drive, the controller, and the host adapter. SCSI drives come with the drive and controller, and the second MM/1 board comes with the host adapter, as well as oodles of other stuff. [Kevin's note: in other words: YES]

Dan Robins) Paul ... a two-parter for ya ... first is a quicky. I remember the original August release date. Are we now just waiting for the FCC interference rating? Meaning [...] has the computer been produced, etc, and now is just waiting on the FCC?

Paul Ward) OK. We have taken our time to put in some outstanding features that were added to the design you guys saw in April. We are in production of developer's machines, but it makes no sense to get them in general production until i's are dotted and t's are crossed.

James Jones) Speaking of type acceptance: will that be Class B? (hoping so)

Paul Ward) Yah, class B.

Dan Robins) Okay ... #2 ... you've given a lot of "can't says" and "in the process" statements about software and hardware add-ons. Is there ANY software or hardware items you can release information on... regarding availability when the computer is released?

Paul Ward) Good question. Let me consult me my team for one sec. OK, let's announce these things. The add-on serial board that we have designed for the first board [...] you know, the one that goes on a header and can be changed to a MIDI port [...] will be available right away, and we have added two headers to the second board that use the same serial port boards, making the MM/1 potentially a five serial port machine. Several of these use hardware handshaking, which

is KEY to some software ideas we have, vis a vis uucp and others. [Note: these "serial boards" referred to are the level-converters and MIDI or 9/25-pin RS232 connectors. They plug into headers on the boards, where the actual serial port chips are located.] ALSO we should have available real soon after the MM/1, a BBS, telecom, word processor, and other things. You'll have to, I'm afraid, wait for specific details. Don't want to announce until we are SURE we can give it right to you!

John Wainwright) OK here we go... Have seen refs to a "3 meg MM1"... does that second board come with 2 megs on it?

Paul Ward) You can get it either way -- if you get it WITH, we'll provide the SIMMS at a great price. If you get it WITHOUT memory but order it WITH the first board, you get \$50 off -- of course, you'll get the \$50 off if you order the board with SIMM memory when you order it with the first board, too. Gosh. Is that clear?

John Wainwright) I think so. Also how about that CoCo-3 connection (OS9 gateway?)

Paul Ward) Excellent question. It's basically a high speed parallel port. The precise way we are going to implement the software is not ready for announcement. However, to be honest, this Gateway idea is fundamentally mine [...] and tragically has not been a big issue to most of our users, leaving my ego bruised. However you should see something on it in 1991. Not right away. Too much other Cool Stuff to do for now.

Brett Wynkoop) If the gateway will allow networking I want one.

Paul Ward) Brett, it's not quite a networking scheme, but it will provide similar benefits.

Jerry Stratton) I've heard XWindows will be available. True? If so, any idea when?

Paul Ward) Jerry, there are safe answers to that and unsafe answers, especially considering that certain things shouldn't be promised too soon. BUT [...] there is already OSK X windows from Eltek, and so it is possible and actually rather efficient. It is POSSIBLE that X could be ported to the MM/1 since the code is available -- at

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**AUSTRALIAN OS9 NEWSLETTER**

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least with the Athena widgets. Let me say that you probably will not be disappointed. That's all.

Jerry Stratton) Thanks.

Brett Wynkoop) [...] on X windows: It is not exactly what I would call a good thing for OSK. Do not get me wrong; I use it all the time at work, but it is a space pig! If my sun did not swap [memory], X would be impossible. We need an X look/feel system that is written like OS9 code (small and efficient!)

Zack Sessions) Paul, earlier you mentioned "developers systems"

Paul Ward) Where is yours, you mean?

Zack Sessions) I know they are being "hand made", just how fast are y'all cranking those out?

Paul Ward) Great question. As fast as we can, where the bottleneck is those chips with long lead times. AND, since we are taking delivery on the new boards tomorrow, we have held off making up any more of the boards that you saw in Chicago.

Zack Sessions) I hope those long lead times don't push into the production system release.

John Dickey) On QuickBasic, will it come with the machine or be available later?

Paul Ward) Later. (Basic09 comes with it, tho)

---- end of conference ----

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INSTALLING A FAN IN YOUR COCO3

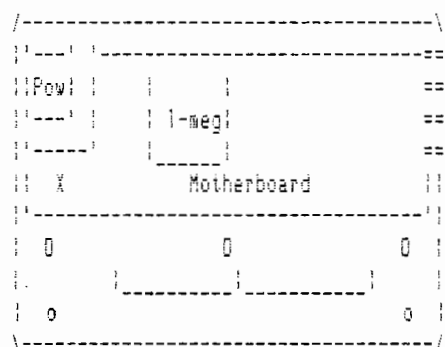
Now that the 1-MEG memory expansions are available, and the price of RAM chips has dropped significantly, a number of our readers are thinking of purchasing them. (If you want to run the new version of MVCanvas, and still have access to your Ramdisk, you will most likely need one!). One problem, however that has arisen seems to be the HEAT generated by all that RAM, which is manifested by all sorts of "sparklies" on the screen, and multiple key repeats etc. The common solution has been to install a fan.

The following article was posted to the OS9 LISTSERVER on internet by Tim Koonce, and we kindly acknowledge his input. We hope that it will give you some indication of what to do when you decide that a fan is really necessary in your CoCo.

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First of all, the particular fan I bought was the 3" 12V DC fan sold by Tandy. I forget the model # (I have it somewhere at home), but there should only be one fan that fits that description. They also sell a smaller fan, but I used the 3-inch square one. It's 1" high, and JUST fits under the keyboard. Assuming you have this fan, open up your CoCo and remove the keyboard. Below is a roughly-schematic drawing

of the CoCo-3 from memory.



Pow = the power supply  
1-meg = Disto 1-Meg Board  
The 0's are the keyboard supports  
The line that goes --- --- below the motherboard represents the ribs which are found beneath the keyboard

The first thing you'll want to do is clear a space for the fan. I put mine to the right of center under the keyboard. Of course, to do this, I had to remove some part of the ribs which are under the keyboard. Decide where you want the fan to go, and remove ribs appropriately! (Remember that you want ventilation holes where the fan goes! Also, you'll want the fan as close

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## AUSTRALIAN OS9 NEWSLETTER

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to the motherboard as is possible.) Block all ventilation holes which will not be under the fan. I blocked mine with cardboard cut to the right size and taped down with masking tape. You'll want to drill (or 'solder') holes for bolts to hold the fan in place. I only used two bolts (all I had available) but you could go all-out and use 4.

About where the 'X' is, look for a LARGE stand-up capacitor. There should be a smaller one right next to it. We're not talking wimpy ceramic caps, (wink) we're talking big, metal-jacketed electrolytic caps! You may wish to verify that you get about 12V across the smaller cap, which is the one you'll be connecting to.

OK, so remove the motherboard from your CoCo. (You'll need to unplug the power supply from a jack right next to it on the motherboard.) Remove the foil underneath the motherboard around the capacitor. Solder the connections for the fan across this smaller stand-up electrolyte capacitor. Reattach the ground-plane, (The foil underneath the motherboard.) routing the wires appropriately. Before you put the motherboard

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For your information, we provide the following details of some new, and some not so new publications which are available overseas for the CoCo and/or the OS9 operating system. We have not actually seen any of them yet, so we can't really vouch for the quality of them. Anyhow, you might want to check yourself (they aren't very costly):

### CocoNotes Newsletter

"This is a bi-monthly magazine for the Tandy Color Computer 1,2 and 3. This magazine features over 15 articles per issue, and deals with OS9, Basic09, RsDos, Pascal, C and programming concepts. Our magazine is growing day by day, so join the fun." We have a report that the magazine a little on the poor side. It's really absolute beginners stuff (nothing wrong with that though). One nice thing is that they do also have a PD collection. You can get 5 (selectable) programs for free with the newsletter every two months. The magazine comes as a printed copy as well as on disk (OS9 or RsDos version). A one-year subscription is US\$10 (printed) or US\$5.00

back, cover all vent holes underneath where it will sit.

Put the motherboard back; replug the power supply to the motherboard. Now, you're ready to bolt down the fan. Route the fan's wires appropriately. Turn on your CoCo ... the fan should whir to a start!

Now, cover all vent holes in the top 1/2 of the CoCo case except those above the power supply and 1-meg board. (I covered these also with cardboard and masking tape on the inside of the case. White cardboard so it doesn't look "goofy.") Replace the keyboard, put the top 1/2 of the case back on, and you're in business!

I hope these instructions are simple and straightforward enough. If you have any questions (or corrections!), ask! That's how I put my fan in, and it's been working flawlessly for a couple months now. It really makes a difference, tho I found I had to have the case screwed tightly shut to keep the air flowing where I want it to. Good luck!

for disk version (select OS9 or RsDos). A single issue is US\$2.25. Include an extra US\$5.00 for overseas shipment. For information or ordering write to:

The CocoNotes newsletter  
P.O. Box 45434  
Tacoma, WA 98445  
USA  
+1 206 535 9733

### TRS-80 Computing

"TRS-80 computing, the bi-monthly magazine for Color Computer users brings you up to 35 pages of great value for your Tandy Color Computer every other month. Some of the features in each issue include:

- \* Informative articles
- \* Many useful programs  
(each issue covers different topics)
- \* Product reviews
- \* Hints & Tips
- \* Special section  
(differs each issue)

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AUSTRALIAN OS9 NEWSLETTER

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They have already been in business for 4 years and are starting a new OS9 column. The company (??) also sells a lot of software for the Coco, write to them for information. 1 Year is US\$12, a single issue US\$1.75. Again include an extra US\$5.00 for shipment to Australia. (Haven't seen this one personally)

TRS-80 Computing  
65 Oak Road  
Canton, MA 02021-2605  
USA  
+1 617 828 7749

The INSIDER

A quarterly newsletter for the latest insider news on Multi-Media and MM/I support. US\$9.95 a year (add US\$5.00 for shipment to Australia). First issue should have appeared on July 1st, however, we have not as yet seen it. We will let you know more about it in the future. Is being published by the creators of the MM/I (IMS, Interactive Media Systems).

Kenneth-Leigh Enterprises  
1840 Biltmore Street NW Suite 10  
Washington DC 20009  
USA

The "OSK-er"

A magazine published by St6 computer systems. In their first issue they'll have the following:

- \* News about the latest OSK and OS9 hardware
- \* Feature articles on the two new computers and their creators
- \* Differences between OSK and OS9
- \* Ongoing articles on C-programming
- \* A software wishlist
- \* Many more surprises

You can get your first issue for only US\$1.00 shipping costs (free within States). A year's subscription is US\$12.00 (States) and \$15.00 for overseas. It will be published bi-monthly, with the first issue appearing by the time you read this. I, personally, think this will be the magazine for any OS9 user, even if you do not want to switch to OSK yet. We assume this magazine will be of more interest to the more experienced user. Anyhow, write to:

The OSK'er  
P.O. Box 24285  
Speedway, IN 46224  
USA

for information or better yet, subscribe..

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