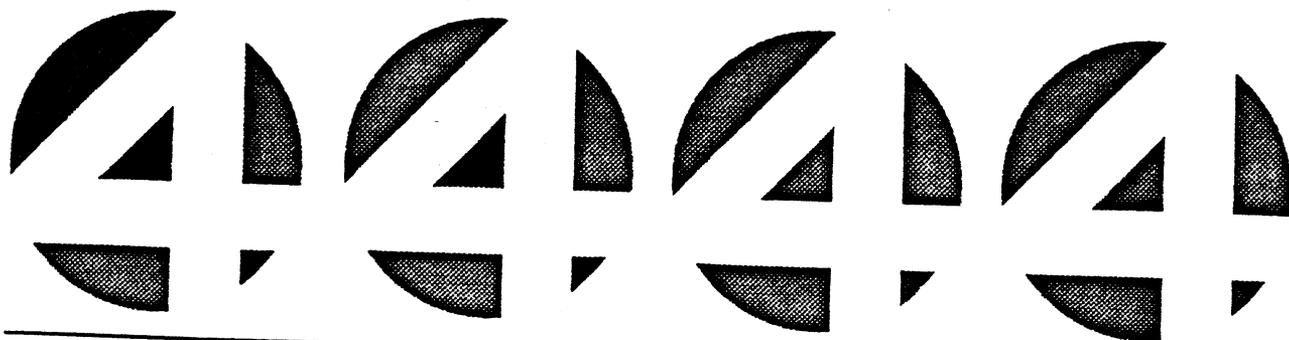
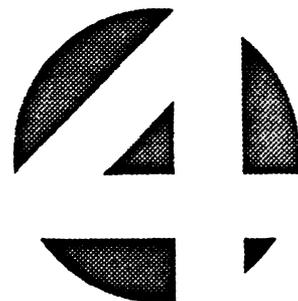

**IRIS
CUSTOMER
SUPPORT
BULLETIN**

© 1990 POINT 4 Data Corporation

January/February 1990



POINT 4 DATA CORPORATION



CUSTOMER SUPPORT BULLETIN

CONTENTS

I. SOFTWARE CUSTOMER SUPPORT BULLETIN

**A. CUSTOMER SUPPORT NEWS
CALENDAR OF UPCOMING EVENTS**

**B. TECHNICAL MEMO:
R7FIXDATE**

**C. TECHNICAL MEMO:
R8FIXDATE**

**D. TECHNICAL MEMO:
R8FIXDATE CHECKSUMS**

II. DOCUMENTATION UPDATES

A. PUBLICATIONS BULLETIN

UPCOMING EVENTS AND DATES TO REMEMBER

Tustin, CA

February 12 (Monday) Software Training - "IRIS BASIC Programming"

February 13 (Tuesday)

February 14 (Wednesday) Software Training - "IRIS System Management"

February 15 (Thursday) Software Training - "IRIS System Configuration"

February 16 (Friday)

February 26 (Monday) MARK 5/6/9/12 Hardware Field Support

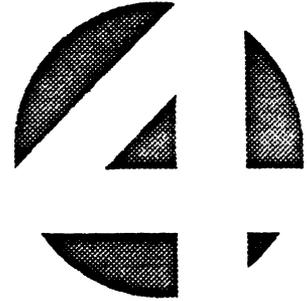
February 27 (Tuesday)

February 28 (Wednesday)

March 1 (Thursday) MARK 2/3/4 Hardware Field Support

March 2 (Friday)

POINT 4 DATA CORPORATION



CUSTOMER SUPPORT NEWS

January/February 1990

by

Steve Moritsugu

POINT 4 Software Support

RUN FIXDATE THIS YEAR ON R7 AND R8 SYSTEMS

Here is a reminder to run FIXDATE on any R7 or R8 IRIS systems this year. You actually have until May, 1991, but we are reminding you almost a year-and-a-half ahead of time so that you can schedule this task at your convenience.

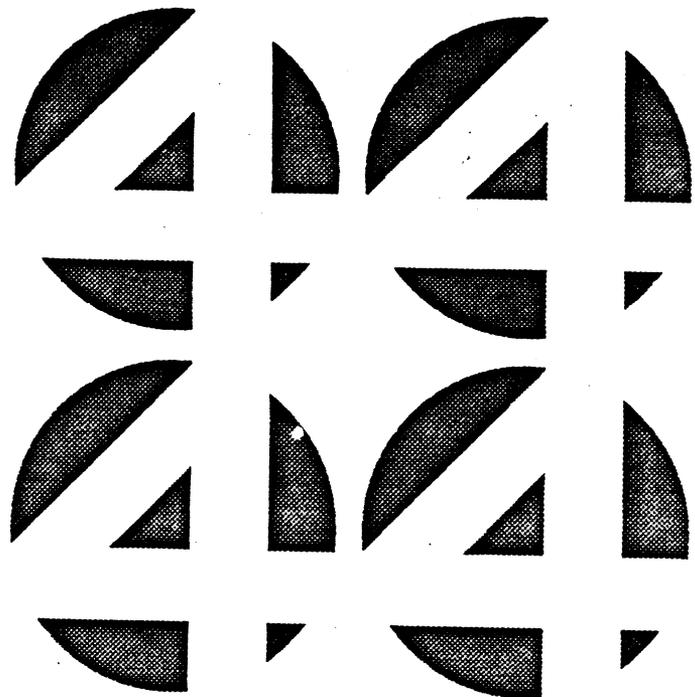
You do not have to run FIXDATE on any R9 IRIS systems. If you can upgrade the R7 or R8 system to R9 before May, 1991, then you will not have to run FIXDATE on it ever again.

Enclosed are tech memos on R7FIXDATE and R8FIXDATE that were originally published in the January 1987 Customer Support Bulletin. These memos give complete information on how to run FIXDATE. Notice that FIXDATE needs to be run every 4 years, so please make sure that you follow the instructions for running it in 1990-1991.



R7FIXDATE
(Run this before May 3, 1991)

JANUARY/FEBRUARY 1990




```

          4444
        44444
      444444
    44444  4
  444      444
 4         44444
          44444

```

TECHNICAL
MEMORANDUM

Reprinted from ORIGINAL
AS DISTRIBUTED JANUARY 10, 1987

```

4444444444 4444
4444444444 444
4444444444 4
4444

```

TO: All IRIS R7 Users
 FROM: Customer Support
 DATE: January 10, 1987
 SUBJ: R7FIXDATE (Run this before May 3, ¹⁹⁹¹~~1987~~!)

In the R7.5 Release Notes, tech memo #43 describes a date extension procedure using a program called FIXDATE that needed to be run before May 3, 1983. A modified version of FIXDATE needs to be run on all R7.5 systems before May 3, 1987. POINT 4 recommends that users upgrade to IRIS Rev 9.0 or later which will eliminate the need to periodically run any FIXDATE-type of procedure. For those users who prefer to remain on R7, this memo describes how to modify and run R7 FIXDATE.

Step 1: See if FIXDATE exists on your R7.5 system. It should have the checkcode C193. If it does not exist with the correct checkcode, follow the procedure given in the R7 Release Notes tech memo #43 to enter the program and also in tech memo #43A to get the correct checkcode.

Step 2: #COPY FIXDATE87!=FIXDATE

Step 3: Apply the following patch to FIXDATE87:

```

10 DIM F$(20),P$(20),T$(30),U$(20),X$(20)
30 LET O=1980
40 LET B=1984
50 LET B1=84
80 LET V1=64875

```

Step 4: You should get the checkcode 1003D. If not, go back to Step 2.

Step 5: #COPY FIXDATE91!=FIXDATE87

Step 6: Apply the following patch to FIXDATE91:

```

30 LET O=1984
40 LET B=1988
50 LET B1=88
80 LET V1=64874

```


Step 7: You should get the checkcode 9455. If not, go back to Step 5.

~~Step 8: In the R7.5 Release Notes, page 43-2, start with Step 8 and follow all subsequent steps, running FIXDATE87 in Steps 19 and 21. This should be done before May 3, 1987. If any problems are encountered, refer to the troubleshooting information on pages 43A-1 and 43A-2.~~

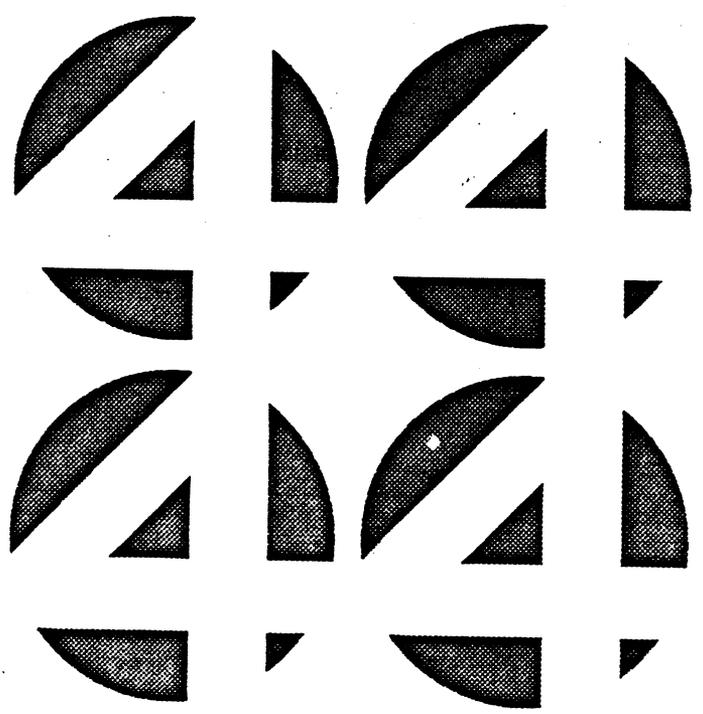
Step 9: Sometime in the year 1990, refer to the R7 Release Notes page 43-2. Start with Step 8 and follow all subsequent steps, running FIXDATE91 in Steps 19 and 21. This should be done before May 3, 1991.

end of procedure



R8FIXDATE
(Run this before May 3, 1991)

JANUARY/FEBRUARY 1990



4444
44444 4
44444 444
4444 4 4444
444 444 44444
4 44444 44444

TECHNICAL
MEMORANDUM

Reprinted from ORIGINAL
AS DISTRIBUTED ON JANUARY 10, 1987

4444444444 4444
4444444444 444
44444444 4
4444

TO: All IRIS R8 Users
FROM: POINT 4 Software Support
DATE: January 10, 1987
SUBJ: R8FIXDATE (Run this before May 3, ¹⁹⁹¹~~1987~~!)

CONTENTS

	Page
INTRODUCTION	1
WHAT R8FIXDATE DOES	2
WHEN TO RUN R8FIXDATE	2
HOW TO RUN R8FIXDATE	3
WHEN DOES R8FIXDATE NEED TO BE RUN AGAIN	6
WHAT TO DO IF YOU WAIT TOO LONG TO RUN R8FIXDATE	6

INTRODUCTION

IRIS stores the date and time in the form of hours since January 1st of the system base year. This value is stored as a one-word binary value to take up the least amount of space, allow easy manipulation, and to be compatible with previous revisions of IRIS. This one-word binary value can hold a maximum of 65535 hours. It can currently be read from IRIS BASIC using the SPC(2) function.

The current base year for all R8 ¹⁹⁹¹ systems is 1980 and the 65535 limit will overflow on May 3, ~~1987~~ at 4 pm. To prevent the system date from overflowing, you should run R8FIXDATE before May 3, ~~1987~~. This memo describes when and how to run R8FIXDATE and what to do if you wait too long to run it.

1991

Note that once you have upgraded your system to Revision 9 of IRIS, it will no longer be necessary to run any FIXDATE-type programs ever again.

WHAT R8FIXDATE DOES

R8FIXDATE advances the system base year by four years. It also changes the function of SPC(2), SPC(18), and adds a new SPC(20) as follows:

SPC(2) returns hours since January 1, 1980.

SPC(18) returns 1980 (the SPC(2) base year).

SPC(20) returns the system base year.

Under previous revisions of IRIS, FIXDATE-type programs reduced SPC(2) each time the base year was advanced. Page 6-24 of the IRIS R8 Release Notes advises the user not to save SPC(2) due to these fluctuations and instead calculate and save the month, day, and year. However many users already have software that saves only SPC(2), and in fact, it would be a very convenient date function to use if only its base year remained constant. Therefore, after running R8FIXDATE, the new SPC(2) will continue to increase as though the base year were always 1980. This will allow it to be saved and used as a convenient date function. These new definitions of SPC(2), SPC(18), and SPC(20) will be carried over into IRIS Rev 9 and future revisions. Thus SPC(2) will be able to exceed 65536 but will not overflow a 2% variable until the year 2092. SPC(2) will not overflow a 3% variable until the year 1122051.

R8FIXDATE also overlays addresses 10000 through 10777 and 23000 through 23377 in DISCSUBS, totally replacing DISCSUBS 42, 43, 44, 46, and 47. It also patches INSTALL addresses 33734 through 33736 and 35767 through 35776. If you have made any assembly language modifications in these locations, you should remove them before running R8FIXDATE.

WHEN TO RUN R8FIXDATE

R8FIXDATE should be run on all R8 IRIS systems before May 3, ¹⁹⁹¹~~1987~~, even if the system was recently delivered from POINT 4.

R8FIXDATE should be run on every logical unit 0 disk that is in use. For example, a site might have a special disk pack or streamer that normally sits on the shelf and is only IPLed when its special configuration is needed. If it is important to be able to set the correct date and time when using that disk, then be sure to run R8FIXDATE on it before May 3, ¹⁹⁹¹~~1987~~. On the other hand, if the system date does not ever need to advance beyond ¹⁹⁹¹~~May 3, 1987~~ on that disk pack, then there is no need to bother running R8FIXDATE. If you can't remember whether or not R8FIXDATE has been run on a particular pack, it is not harmful to run R8FIXDATE multiple times.

R8FIXDATE also updates all INSTALLED logical units; however, a site might have special disk packs or streamers that contain nonzero logical units with programs or data that are only put on the system when necessary. If the AGE and HOURS SINCE LAST ACCESS of those files are important, then R8FIXDATE should be rerun as many times as necessary to update all such logical units. It is perfectly safe to run R8FIXDATE more than once on any logical unit including logical unit 0. If you don't run R8FIXDATE on a logical unit, the only harm is that the AGE and HOURS SINCE LAST ACCESS will be incorrect.

Note: If you transport a logical unit from a system where R8FIXDATE has been run to an R8 system where R8FIXDATE has never been run, the only problem you will encounter is that the age and hours since last access of files on that LU will be incorrect until R8FIXDATE is run.

HOW TO RUN R8FIXDATE

In order to run R8FIXDATE, the following are required:

- IRIS Rev 8.2 (including 8.2A, 8.2B, etc.) or 8.3 (including 8.3C, 8.3D, etc.) - If you have IRIS Rev 8.0 or 8.1, we recommend that you upgrade to a newer revision of IRIS. If you have IRIS Rev 7, please refer to the R7 FIXDATE memo. If you have IRIS Rev 9, there is no need to run any FIXDATE-type program at all.
- R8FIXDATE, a BASIC program, and R8FIXDATEDATA, an object file, type 77003 - These files can be ordered on a logical unit from POINT 4.

The procedure for running R8FIXDATE is as follows:

Step 1: Back up the system and all logical units. Then re-IPL, log onto the MANAGER account, and INSTALL all logical units. Make sure no other users are on the system.

Step 2: Make sure that R8FIXDATE and R8FIXDATEDATA are both on the same logical unit (any LU is ok). Use VERIFY to display the checkcode for R8FIXDATE which should be *46300k* -770B. Calculate a checksum for R8FIXDATEDATA by using DSP as shown:

```
#DSP :  
F ##/R8FIXDATEDATA  
X0,7777
```

You should get 6776. If either checkcode is incorrect, do not proceed until the correct versions are obtained.

Step 3: Run GUARD and make sure that R8FIXDATE has option 2 enabled to allow it to "read-write files ignoring file protection."

Step 4: Run R8FIXDATE. It displays its revision number in the upper right hand-corner, then checks to see if R8FIXDATE has been run on this LU 0 before. If so, go to Step 5. If not, it displays on the comment line "CHECKING FIXDATE DATA - PLEASE WAIT". It then checks that the DISCSUBS to be overwritten are at the correct addresses and verifies the R8FIXDATEDATA file. If either is incorrect, it prints an error message and aborts before any changes have been made to the system. If both are ok, it reminds you to "NOTE: DISCSUBS 42, 43, 44, 46, & 47 (LOC 10000-10777 & 23000-23377) WILL BE OVERLAYED. INSTALL WILL BE PATCHED."

Note that if R8FIXDATE had found that the old contents of INSTALL to be patched were incorrect, it would have printed "INSTALL WILL NOT BE PATCHED." but it would not have aborted. It is perfectly ok to proceed without the INSTALL patch. In that case, the AGE and HOURS SINCE LAST ACCESS of files will be incorrect on any logical unit that has been INSTALLED AND CLEARED since R8FIXDATE was last run (unless you run R8FIXDATE immediately after any INSTALL AND CLEAR).

It then asks "HAS THE SYSTEM BEEN BACKED UP? (Y/N)" Answer YES since you did backups in Step 1.

Step 5: It displays the current date and time and asks "IS THIS THE CORRECT DATE & TIME:___". If it is approximately correct, answer YES and go on to Step 6. If it is incorrect, answer NO. It then tells you to "RUN SETTIME TO SET THE CORRECT DATE AND TIME". Do so and then go to Step 4. If you go too many years without running R8FIXDATE, SETTIME might not be able to set the correct date and time. If so, see the section, "WHAT TO DO IF YOU WAIT TO LONG TO RUN R8FIXDATE".

Step 6: It then reminds you that "WHEN R8FIXDATE COMPLETES, A SHUTDOWN OCCURS" and requests "FILE TO SHUTDOWN TO (LU/FILENAME OR (RETURN)):". Here you might specify 0/DISCUILITY so that you can use the IPL program option to reboot the system without having to go to the computer to press APL. If you press <ESC> here, you go back to Step 5.

Step 7: It then tells you the CURRENT YEAR, the current BASE YEAR of LU 0, and what the NEW BASE YEAR will be and asks, "ARE ALL OF THE ABOVE CORRECT ?" Since CURRENT YEAR, BASE YEAR, and NEW BASE YEAR are computed for you, this question is really asking if you want to go back and change your answer to Step 6 above. A NO response goes back to Step 6. A Y or YES response means go ahead and update the disk.

- Step 8: It then flashes "ADJUSTING BASE DATE - PLEASE WAIT". Then for each installed logical unit, it displays "ADJUSTING LOGICAL UNIT ##/ - PLEASE WAIT". If some of the logical units have already had R8FIXDATE run on them, the message for those logical units reads "LOGICAL UNIT ##/ - NO ADJUSTMENT REQUIRED".
- Step 9: When done, it displays "FINISHED ADJUSTING ALL INSTALLED LOGICAL UNITS". It then executes a SHUTDOWN to the filename requested in Step 6. At this point, everything has completed successfully and R8FIXDATE is done. Re-IPL and apply the following patches.
- Step 10: Apply the following patches to the four BASIC programs named. Any user BASIC programs which look into the file header block at age or hours since last accessed will need similar patches. VERIFY the starting checkcode before applying the patch on both 8.2 and 8.3 systems. It is also a good idea to COPY the basic program before patching in case the ending checksum does not agree and you have to try it again.

- Program 5/QUERYPF ✓
 checkcode before applying patch: 774E
 after: 1116A
 patch:
 1070 REM Calculate hours since SPC(20)
 1070 LET T1 = SPC(2)-24*31*12*(SPC(20)-SPC(18))
- Program 5/ANALYPF
 checkcode before applying patch: D3B3
 after: AD ✓
 patch:
 1180 LET T1 = SPC(2)-24*31*12*(SPC(20)-SPC(18))
- Program 0/ACCOUNTUTILITY
 8.2 checkcode before applying patch: 8E0D
 after: 45CA
 8.3 checkcode before applying patch: 11B81
 after: 9E30
 patch:
 8430 REM Y=SPC 2; Set Y8=current year
 8430 LET Y8 = INT(SPC(18)+INT(Y/8928))
 8440 REM Set Z8=# of hours into current year
 8440 LET Z8 = Y-(Y8-SPC(18))*8928
- Program 0/ACTUTIL.1
 8.2 checkcode before applying patch: 1144E
 after: 7AAC
 8.3 checkcode before applying patch: 1416A
 after: A442
 patch:
 2320 LET Y8 = INT(SPC(18)+INT(Y/8928))
 2330 LET Z8 = Y-(Y8-SPC(18))*8928

end of procedure

WHEN DOES R8FIXDATE NEED TO BE RUN AGAIN

R8FIXDATE should be rerun every 4 years as shown:

<u>Cycle #</u>	<u>Recommended Year to run R8FIXDATE</u>	<u>Latest Possible</u>	<u>Base Year</u>	
			<u>Old</u>	<u>New</u>
1	1987	May 3, 1987	1980	1984
2	1990	May 3, 1991	1984	1988
3	1994	May 3, 1995	1988	1992

From the chart, we can see that R8FIXDATE should be run for the first time before May 3, 1987 to change the system base year from 1980 to 1984. It should be run for the second time any day in the year 1990 to change the system base year from 1984 to 1988. That second run of R8FIXDATE could occur as late as May 3, 1991. Running R8FIXDATE after the recommended year has the disadvantage that you might get delayed and miss the May 3 deadline. Note that R8FIXDATE cannot extend R8 systems beyond May 3, 1995.

Once R8FIXDATE and R8FIXDATEDATA have been put on a system, it then becomes very easy to run R8FIXDATE a second or third time as necessary. Once you upgrade to R9, you can forget about FIXDATE forever since it will be handled automatically by the system.

WHAT TO DO IF YOU WAIT TOO LONG TO RUN R8FIXDATE

You should run R8FIXDATE for the first time before May 3, 1987 to change the base year from 1980 to 1984. If you do not run it before then, you will find that at 4 pm on May 3, 1987, the time will go back to 3 pm as though the system had lost an hour. Everything else will continue to run ok. Then, as the clock reaches 4 pm (which is now really 5 pm), it will again go back to 3 pm. In this way, the time will remain stuck between 3 pm and 4 pm on May 3, 1987 forever after. Everything else will continue to function normally. In fact, if the correct system date is not important, the system can be left in this condition without ever running R8FIXDATE.

If you do not run R8FIXDATE before 4 pm on May 3, 1987, and then try to set the correct date and time with SETTIME or CALL \$TIME, you will find that the date and time get set back to some unexpected value between Jan 1, 1980 and May 3, 1987. You could also get a basic error 38 and be prevented from setting the correct date and time.

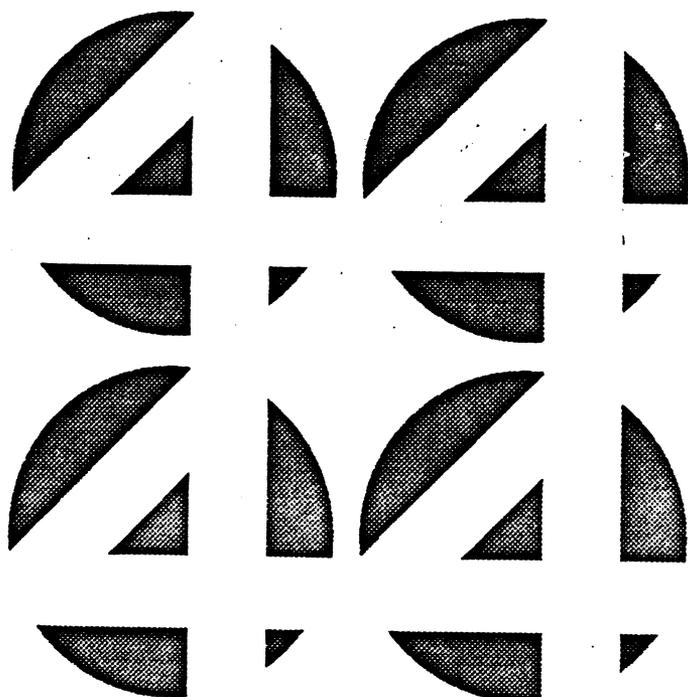
If you then want to run R8FIXDATE, you will find that you cannot comply with Step 5 of the procedure to set the correct date and time. To solve this problem, act as if the date were May 2 of the deadline year (any hour is ok) when following the R8FIXDATE procedure. For example, if R8FIXDATE was supposed to have been run by May 3, 1987 and it is now June 1987, then act as if the date were May 2, 1987 when you run R8FIXDATE. Once the procedure is complete, set the correct date and time.

If you miss two cycles, then you must run R8FIXDATE twice. For example, if the date is now June 1991 and you have an old R8 system on which R8FIXDATE has never been run, you must first set the date to May 2, 1987 and run R8FIXDATE. Set the date to May 2, 1991 and run R8FIXDATE again. Then set the correct date and time.



R8FIXDATE CHECKSUMS

JANUARY/FEBRUARY 1990



POINT 4 Data Corporation

```

          4444
        44444
      44444
    4444
  444
4

```

TECHNICAL
MEMORANDUM

*Reprinted from original
AS distributed March 18, 1987*

```

444444444444 4444
444444444444 444
444444444444 4
4444

```

TO: All IRIS 8.2 Users
 FROM: Software Support
 DATE: March 18, 1987
 SUBJ: R8FIXDATE CHECKSUMS

L A T E B R E A K I N G N E W S !

It has been brought to our attention that when the basic file R8FIXDATE has been dumped to a text file and then loaded as a new basic file, the checksums will not match. The R8FIXDATE Tech Memo of January 10, 1987 states that the checksum should be 770B, but when dumped to a text file and reloaded, it has a checksum of 463C. In general, if you get either checksum, 770B or 463C, then you have the correct version.

