

OSIRIS Operating System Archive

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```
MDS MONITOR, V2.0
                  manna i i
OSIRIS V 3.00
-ASSIGN #1 TO 1
:WO#01: assigned to :F1:
-WDIR
Date: 28-JUL-92
Partition Directory of :WO:
       Label
                  Trks Type
   O SYSTEM.DSK 152 M
                 152 M
   1 APR86 .LIB
                              :F1:
          Click images for larger view
```

The standard operating system in the late 70's for Intel Intellec MDS800 or MDS888 Development System computers was ISIS and ISIS-II. Same for some future models including Series-II. CP/M would also run on these systems.

The OS on an MDS888 I'm restoring uses something called OSIRIS V3.0 and was possibly an unreleased interim version of ISIS or maybe a customized version for use with a hard disk, by Intel or a 3rd party.

This page serves as an archive to preserve this software and to explore with other vintage computer preservationists.

Hardware Overview

The system is comprised of these components:

- MDS888 computer with 64K RAM
- MDSDDR dual double-density 8" floppy drive subsystem (SBC202)
- UPP-101 PROM programmer
- External hard disk subsystem. Radio Switch #525 with ST-225 20mb drive
- 8080, 8049 ICE systems ■ For more details, see the MDS888 page.

Floppy Disk

One 8" SSDD floppy disk came with my system and it is labelled OSIMAN.300 System Mgr Disk.

Here is a <u>directory listing</u> as a text file.

```
-dir 4 i
Date: 28-JUL-92
Directory of :F4:0SIMAN.300
Name .Ext Blks Length Attr Name .Ext Blks Length Attr
                                                    512
                   3200 IF
                                ISIS .MAP
ISIS .T0
                   2944 IF
                                ISIS .LAB
                                           54
                                                   6784 IF
            24
                  11470 SIF
ISIS .BIN
                                ISIS .CLI
                                                   4996 SIF
ASSIGN
                                BACKUP
            33
                   4072 WSI
                                             73
                                                   9001 WSI
BYE
            13
                   1531 WSI
                                CHKDSK
                                                   6701 WSI
                                                   5747 WSI
DATE
                   2227 WSI
                                DIR
            19
IPART
            57
                   7086 WSI
                                IWDISK
                                            43
                                                   5304 WSI
PASS
             5
                   386 WSI
                                RELABL
                                            33
                                                   4024 WSI
                   2562 WSI
REMOVE
            22
                                RESTOR
                                                   7840 WSI
SYSLBL
                   3727 WSI
                                WDIAG
                                            89
                                                  11019 WSI
            31
WDIR
            32
                   3956 WSI
                                DELETE
                                            39
                                                   4794
HELLO
            27
                   3224
                                PATCH
                                            57
                                                   7047
INIDSK.CMD
            16
                   1837
                                CPYSYS.CMD
                                                    239
RECOVR.CMD
            4
                   267
                                STARTS.CMD
                                                    629
                                                    9
OSIRIS.LIB
            9
                   918
                                RUN .MAC
                                             2
                   3456
                                S00401.BAD
SPOOL .QUE
            28
                                                    122
IBMCOM
                   3071
```

Here are the floppy files in a zip.

WDIR

At bootup, the START.CMD submit/batch file runs and assigns the drives then displays a WDIR showing the partitions.

Here is a Directory listing

```
OSIRIS V 3.00
-ASSIGN #1 TO 1
:W0#01: assigned to :F1:
-WDIR
Date: 28-JUL-92
Partition Directory of :W0:
  # Label
                Trks Type
  0 SYSTEM.DSK 152 M
  1 APR86 .LIB 152 M
  2 CONTRA.VES 152 M
                152 M
  3 HEI582.SYS
  4 HEI516.SYS
                152 M
  5 NEW522.SYS
                152 M
  6 HEI530.SYS
                152 M
  7 JN1631.SYS
                152 M
  8 JN1395.SYS
                152 M
  10 TEMP .HEX
                152 M
  11 JN1560.SYS
                152 M
  12 JN1601.SYS
                 76 D
  13 ABDEEN.SYS
                 76 D
  14 JN1610.SYS
                 76 D
  15 DRV516.525
                 76 D
  16 HEI522.BAK
                 76 D
 17 KTNCH SYS 76 D
```

SYSTEM.DSK

After bootup and the automatic assign's, :F0: is the first partition on the hard disk named SYSTEM.DSK.

Here is a directory listing as a text file.

NEW582	85	10586	JER .OBJ	15	1726	
RSSVR .OBJ	13	1425	CCIR22	52	6407	
CONENC.SRC	248	31138	NTSC22.CMD	3	156	
CCIR22.CMD	2	125	TEST .BAK	3	155	
TEST .CMD	3	155	DAT516.ASM	35	4329	
CJ922 .OBJ	10	1120	HE5828.CMD	3	166	
T .BAK	2	47	GPIB4 .ASM	74	9193	
T .CMD	2	53	JN2089	41	5066	
JN2109	40	4922	J1642D.CMD	3	133	
CDTEST.OBJ	2	73	HE5826	85	10589	
HE5826.CSD	3	166	PROM2S.OBJ	5	464	
COND6 .CMD	3	134	COND6	97	12043	
TPROM .OBJ	5	422	JN1896.BIN	21	2482	
HE522B	51	6390	HEI582	37	4481	
			7194			
725// 700/	Blacks	Head				

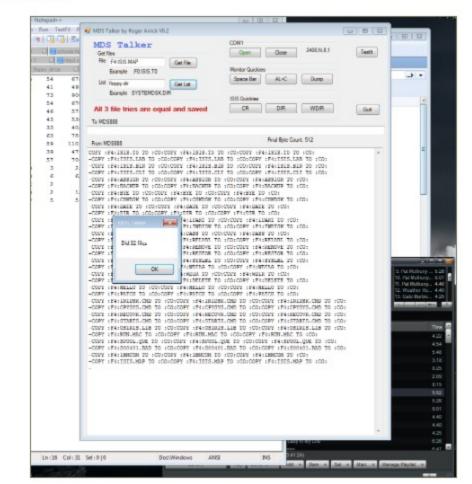
Here are the SYSTEM.DSK files in a zip, excluding anything that looked like a user file.

MDS Talk

Capturing these files was done using a custom VB program I wrote called MDS Talk. It runs on a standard Windows PC using a standard RS-232 serial port. MDS Talk communicates to the MDS888 via its CRT port at 2400 baud (N81). The cable is 3 wires only - RXD, TXD, GND. No handshake is involved. The files are sent using the COPY command to :CO:. The allowed me to transfer the files without writing to any of the media in the MDS888.

With MDS Talk, I can boot the system providing a Space Bar, send commands such as DIR and ASSIGN, and transfer files. Data integrity is accomplished by transferring each file 3 times then comparing, along with matching file sizes to the DIR listing.

Here is a screen shot of MDS Talk.



Alternative Transfer Method

Initially I transferred some of the files manually just to see if it was possible and it is. I communicated with the MDS888's CRT port at 2400 baud with a Windows PC running RealTerm. With it I could issue commands like COPY :F0:FILE.NAM TO :CO: and capture the results which appeared as non-ASCII garbage on the screen.

After each transfer I edited the files using the HxD hex editor. With HxD I could see and remove the initial CR/LF echoed by the initial command, then the final batch of text including the response "COPIED :F0:FILE.NAM TO :CO:". In the end, if done right, the file size matches the DIR listing.

RogerArrick.com

Several files were successfully transferred this way and tested for integrity on another MDS including a large BASIC interpreter. It's not an automated process but I think you could transfer several dozen files an hour this way.

Ken Burgett, Creator of the ISIS Operating System

Here's a conversation I had with Ken about ISIS, OSIRIS, etc.

Related Pages

- Roger's MDS800 MDS888 Computer page
- How to run Kermit to transfer program on ISIS/OSIRIS.