

SYMBOL/STATS1

BEGIN% TIME SHARING SYSTEM-STATISTICS FILE ANALYSIS.

COMMENT: * TITLE: B5500/B5700 MARK XIV SYSTEM RELEASE * 00000110
 * FILE ID: SYMBOL/STATS1 TAPE ID: SYMBOL2/FILE000 * 00000111
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FILE PRINT 4(2,15); 00000200

DISK DISK SERIAL (2,60,60); 00000300
 TWX REMOTE(2,10); 00000400
 00000500

%----- FORMATS ----- 00000600

FORMAT F(A6," =",F6.2,"%",A1,I8),AF(A1), 00000700
 00000800

FS(A6," =",2(F6.2,"%",A1,I8,"),F4.1), 00000900

HD (X8,"% OF I/O",X3,"# I/O",X5,"% OF CHAR",X1,"TOTAL SEGS",X3, 00001000

"SEG/I/O"), 00001100

DW("AVG. DISK DELAY = ",F7.3," SECS."), 00001200

SW("AVG. SWAP DELAY = ",F7.3," SECS."), 00001300

TS("TOTAL SWAP DELAY = ",F7.3," MINS."), 00001400

TD("TOTAL DISK DELAY = ",F7.3," MINS."), 00001500

DN("DOWN TIME = ",F7.3," MINS."), 00001600

H(A6,X2,F6.2,"%"), 00001700

TM("TIME SINCE LAST HALT/LOAD IS ",I2," HOURS AND ", 00001800

I2," MINUTES"),L("STATISTICS FROM ",I2," ON ",0, 00001900

" TO ",I2," ON ",0,""),G(A6,X2,2(F6.2,"% ")), 00002000

N("/"NORMALIZED"/),BI(// " BUSY IDLE"/), 00002100

DOGRAPHS("GRAPHS DESIRED(YES OR NO)-"), 00002200

F1(X2,I3,X2,F7.2), 00002300

F2(X2,I3), 00002400

F3(X16,"+-----+-----+-----+-----", 00002500

" +-----+-----+-----+-----", 00002600

" +-----+-----+-----+-----"), 00002700

F4(X16,"0 10 20 30 ", 00002800

"40 50 60 70 ", 00002900

"80 90 100"), 00003000

F5("SWAPPING STATISTICS"), 00003100

F6("SEGMENT COUNT IN SEGMENTS/I/O - FREQUENCY DISTRIBUTION"), 00003200

F7(X1,"SEGMENTS % OF"), 00003300

F8(X1," MOVED CHAR"), 00003400

F9(X1,"-----"), 00003500

F10(X1," MOVED IO "), 00003600

F11(X49,"PERCENTAGE OF CHARACTERS TRANSFERRED"), 00003700

F12(X52,"PERCENTAGE OF I/O OPERATIONS"), 00003800

IOHDR1("DISK I/O-"), 00003900

IOHDR2("OTHER I/O-"), 00004000

IOHDR3("TOTAL I/O-"), 00004100

ASKFORAFILE("WHICH SYSTEM FILE "); 00004200

%----- 00004300

SAVE ARRAY A[0:61],B[0:1],SUMSTAT[0:60]; 00004500

ARRAY STR[0:100],STR2[0:100],FILLARRAY[0:14],LOGEO[1]; 00004600

REAL TOTAL,SEGTOT,W,X,Y,Z,S,C,T,D,I,STARTIME,ENDTIME,AP2; 00004700

REAL OTHERIO,TOTIO; 00004800

BOOLEAN RUNTOTAL,SEGS,ENDTOG,BEGINTOG,GRAPHS; 00004900

LABEL EOF,DOAGAIN; 00005000

Data Documents/Inc.

	%-----	00005100
1	STREAM PROCEDURE SCANFILE(LOG);	00005200
2	BEGIN REAL LOCAL2,LOCAL1;	00005300
3	SI:=LOG; DI:= LOC LOCAL1;	00005400
4	DI:=DI+1;	00005500
5	7(IF SC="/" THEN DS:=LIT" " ELSE DS:= CHR);	00005600
6	SI:=SI+1; DI:=DI+1;	00005700
7	DS:=7 CHR;	00005800
8	SI:=LOC LOCAL1; DI:=LOG;	00005900
9	DS:=16 CHR;	00006000
10	END;	00006100
11	%-----	00006200
12	STREAM PROCEDURE FILLIT(ARRAY,N1,N2,N3,N4); VALUE N1,N2,N3,N4;	00006300
13	BEGIN	00006400
14	DI:=ARRAY;	00006500
15	DS:=16LIT" ";	00006600
16	DS:=LIT" ";	00006700
17	N1(DS:=LIT"*");	00006800
18	N2(DS:=LIT"*");	00006900
19	N3(DS:=LIT" ");	00007000
20	N4(DS:=LIT" ");	00007100
21	END FILLIT;	00007200
22	%-----	00007300
23	BOOLEAN STREAM PROCEDURE SCANTWX(YESORNO);	00007400
24	BEGIN	00007500
25	SI:=YESORNO;	00007600
26	8(IF SC="Y" THEN TALLY:=1 ELSE SI:=SI+1);	00007700
27	SCANTWX:=TALLY;	00007800
28	END;	00007900
29	%-----	00008000
30	PROCEDURE GRAPHIT(STR,A); VALUE A; REAL A; ARRAY STR[*];	00008100
31	BEGIN	00008200
32	WRITE(PRINT[DBL],F5); WRITE(PRINT[DBL],F6);	00008300
33	WRITE(PRINT,F7);	00008400
34	IF A=0 THEN WRITE(PRINT[DBL],F8) ELSE WRITE(PRINT[DBL],F10);	00008500
35	WRITE(PRINT[DBL],F9);	00008600
36	FOR I:= 60 STEP -1 UNTIL 0 DO	00008700
37	BEGIN	00008800
38	C:=ENTIER(STR[I]); S:=103-C;	00008900
39	IF C GTR 63 THEN	00009000
40	BEGIN	00009100
41	D:=0;	00009200
42	T:=C-63;	00009300
43	C:=63;	00009400
44	END ELSE IF C LSS 40 THEN	00009500
45	BEGIN	00009600
46	D:=S-63;	00009700
47	S:=63;	00009800
48	T:=0;	00009900
49	END ELSE	00010000
50	BEGIN	00010100
51	D:=0;	00010200
52	T:=0;	00010300
53	END;	00010400
54	IF C=0 AND STR[I] NEQ 0 THEN BEGIN C:=1; S:=S-1 END;	00010500
55	IF (C+T+D+S) GEG 104 THEN GO TO DOAGAIN;	00010600
56	IF (C LSS 0) OR (T LSS 0) OR (S LSS 0) OR (D LSS 0) THEN	00010700
57	GO TO DOAGAIN;	00010800
	FILLIT(FILLARRAY[0],C,T,S,D);	00010900
	WRITE(PRINT[NO],15,FILLARRAY[*]);	00011000

```
IF STR[1] NEQ 0 THEN WRITE(PRINT,F1,[,STR[1]) ELSE  
WRITE(PRINT,F2,1);  
END;
```

```
00011100  
00011200  
00011300
```

```
WRITE(PRINT[DBL],F3);  
WRITE(PRINT,F4); WRITE(PRINT);  
IF A = 0 THEN WRITE(PRINT,F11) ELSE WRITE(PRINT,F12);  
END GRAPHIT;
```

```
00011400  
00011500  
00011600  
00011700
```

```
%-----  
PROCEDURE PP(P1,P2,P3); VALUE P1,P2,P3; REAL P1,P2,P3;
```

```
00011800  
00011900
```

```
BEGIN  
AP2:=A[ABS(P2)];  
IF P2 LSS 0 THEN BEGIN P2:=ABS(P2); A[P2]:=AP2,[1:23] END ELSE
```

```
00012000  
00012100  
00012200
```

```
A[P2]:=AP2,[24:24];  
IF A[P2] NEQ 0 THEN  
IF P3=0 THEN  
WRITE(PRINT,G,P1,A[P2]/TOTAL*100,(TOTAL-A[P2])/TOTAL*100)  
ELSE  
WRITE(PRINT,H,P1,A[P2]/TOTAL*100);
```

```
00012300  
00012400  
00012500  
00012600  
00012700  
00012800
```

```
A[P2]:=AP2;  
END;
```

```
00012900  
00013000
```

```
%-----  
PROCEDURE R(R1,R2); VALUE R1,R2; REAL R1,R2;
```

```
00013100  
00013200
```

```
BEGIN REAL AR2;  
AR2:=A[ABS(R2)];  
IF R2 LSS 0 THEN BEGIN R2:=ABS(R2); A[R2]:=AR2,[1:23] END ELSE  
A[R2]:=AR2,[24:24];  
IF A[R2] NEQ 0 THEN
```

```
00013300  
00013400  
00013500  
00013600  
00013700
```

```
BEGIN IF RUNTOTAL THEN A[0]:=A[0]-A[R2];  
IF RUNTOTAL THEN A[30]:=A[30]-A[R2+30];  
IF SEGS THEN
```

```
00013800  
00013900  
00014000
```

```
BEGIN  
WRITE(PRINT,FS,R1,C:=(A[R2]/TOTAL*100),"",A[R2],  
S:=(A[R2+30]/SEGTOT*100),"",A[R2+30],T:=(A[R2+30]/A[R2]));
```

```
00014100  
00014200  
00014300
```

```
IF GRAPHS THEN  
BEGIN  
IF T LSS 0 THEN T:=0 ELSE
```

```
00014400  
00014500  
00014600
```

```
T:=ENTIER(T);  
STR[T]:=STR[T]+S;  
STR2[T]:=STR2[T]+C;
```

```
00014700  
00014800  
00014900
```

```
END;
```

```
00015000
```

```
END ELSE  
WRITE(PRINT,F,R1,A[R2]/TOTAL*100,Y,A[R2]);
```

```
00015100  
00015200
```

```
END;  
A[R2]:=AR2;  
END;
```

```
00015300  
00015400  
00015500
```

```
%-----  
DEFINE  
P(P1,P2)=PP(P1,P2,0);  
Q(Q1,Q2,Q3)=R(Q1,Q3); A[Q3]:=TOTAL-A[Q3]; R(Q2,Q3); #;  
BK=WRITE(PRINT)#;
```

```
00015600  
00015700  
00015800  
00015900  
00016000  
00016100
```

```
%----- MAIN BODY -----
```

```
00016200
```

```
WRITE(TWX[STOP],DOGRAPHS); READ(TWX,/,Y);  
IF SCANTWX(Y) THEN GRAPHS:=TRUE;  
WRITE(TWX[STOP],ASKFORAFILE); READ(TWX,2,LOG[*]);  
SCANFILE(LOG);  
FILL DISK WITH LOG[0],LOG[1];  
BEGINTOG:=TRUE;  
DOAGAIN;
```

```
00016300  
00016400  
00016500  
00016600  
00016700  
00016800  
00016900  
00017000
```

	READ (DISK,60,A[*])[ECF];	00017100
	IF A[0] = REAL(NOT FALSE) THEN	00017200
1	BEGIN	00017300
2	FOR I:=0 STEP 1 UNTIL 59 DO A[I]:=SUMSTAT[I];	00017400
3	A[29]:=ENDTIME;	00017500
4	ENDTOG:=TRUE;	00017600
5	END ELSE	00017700
6	BEGIN	00017800
7	IF BEGINTOG THEN BEGIN STARTIME:=A[47]; BEGINTOG:=FALSE END;	00017900
8	FOR I:=0 STEP 1 UNTIL 27 DO SUMSTAT[I]:=SUMSTAT[I]+A[I];	00018000
9	FOR I:=30 STEP 1 UNTIL 46 DO SUMSTAT[I]:=SUMSTAT[I]+A[I];	00018100
10	FOR I:=48 STEP 1 UNTIL 59 DO SUMSTAT[I]:=SUMSTAT[I]+A[I];	00018200
11	SUMSTAT[28]:=A[28];	00018300
12	END;	00018400
13		00018500
14	BK; WRITE(PRINT,PAGE);	00018600
15	WRITE(PRINT, TM, A[1] DIV 216000, A[1]/3600 MOD 60);	00018700
16	IF ENDTOG THEN	00018800
17	WRITE(PRINT, L, STARTIME DIV 216000, STARTIME/	00018900
18	3600 MOD 60, A[28], (X:=A[29]) DIV 216000, X/3600 MOD 60, A[28])	00019000
19	ELSE	00019100
20	WRITE(PRINT, L, A[47] DIV 216000, A[47]/3600 MOD 60,	00019200
21	A[28], (X:=A[29]) DIV 216000, X/3600 MOD 60, A[28]);	00019300
22	A[0]:=MAX(A[0], A[2]);	00019400
23	TOTAL:=A[0];	00019500
24	SEGTOT:=A[30];	00019600
25	TOTIO:=A[0]+(OTHERIO:=A[58].[1:23]+A[58].[24:24]+	00019700
26	A[59].[1:23]+A[59].[24:24]);	00019800
27	BK;	00019900
28	WRITE(PRINT, DW, A[32]/TOTAL/60);	00020000
29	WRITE(PRINT, TD, A[32]/3600);	00020100
30	IF A[34]=0 THEN A[34]:=1;	00020200
31	WRITE(PRINT, SW, A[33]/A[34]/60);	00020300
32	WRITE(PRINT, TS, A[33]/3600);	00020400
33	BK;	00020500
34	WRITE (PRINT, HD);	00020600
35	BK;	00020700
36	SEGS:=TRUE; R("TOTAL ", 0); SEGS:=FALSE;	00020800
37	Y:=", ";	00020900
38	BK;	00021000
39	Q("DKA ", "DKB ", 2);	00021100
40	BK;	00021200
41	R("EU 0 ", 4);	00021300
42	R("EU 1 ", -4);	00021400
43	R("EU 2 ", 5);	00021500
44	R("EU 3 ", -5);	00021600
45	BK;	00021700
46	WRITE(PRINT, IOHOR1);	00021800
47	BK;	00021900
48	R("IO 1 ", 35);	00022000
49	R("IO 2 ", 36);	00022100
50	R("IO 3 ", -35);	00022200
51	R("IO 4 ", -36);	00022300
52	BK;	00022400
53	WRITE(PRINT, IOHOR2);	00022500
54	BK;	00022600
55	TOTAL:=OTHERIO;	00022700
56	R("IO 1 ", 58);	00022800
57	R("IO 2 ", 59);	00022900
		00023000

	R("IO 3 ",-58);	00023100
	R("IO 4 ",-59);	00023200
	BK;	00023300
1	WRITE(PRINT,IOHDR3);	00023400
2	TOTAL:=TOTIO;	00023500
3	BK;	00023600
4	A[58],[24:24]:=A[58],[24:24]+A[35],[24:24];	00023700
5	A[59],[24:24]:=A[59],[24:24]+A[36],[24:24];	00023800
6	A[58],[1:23]:=A[58],[1:23]+A[35],[1:23];	00023900
7	A[59],[1:23]:=A[59],[1:23]+A[36],[1:23];	00024000
8	R("IO 1 ",58);	00024100
9	R("IO 2 ",59);	00024200
10	R("IO 3 ",-58);	00024300
11	R("IO 4 ",-59);	00024400
12	BK;	00024500
13	TOTAL:=A[0];	00024600
14	Q("NORMAL","CONTRL",9);	00024700
15	BK;	00024800
16	Q("BELOW ","ABOVE ",13);	00024900
17	BK;	00025000
18	RUNTOTAL:=TRUE;	00025100
19	SEGS:=TRUE;	00025200
20	FOR I:=0 STEP 1 UNTIL 100 DO STR[I]:=STR2[I]:=0;	00025300
21	R("ESP ",11);	00025400
22	R("DIRECT",12);	00025500
23	R("HEADER",25);	00025600
24	R("NAMES ",26);	00025700
25	R("SYS DK",23);	00025800
26	R("LOG ",24);	00025900
27	R("TANKS ",16);	00026000
28	R("LIBRY ",18);	00026100
29	BK;	00026200
30	R("SWAPS ",15);	00026300
31	BK;	00026400
32	R("CODE M",10);	00026500
33	R("CODE B",19);	00026600
34	R("CODE A",20);	00026700
35	BK;	00026800
36	R("DATA B",21);	00026900
37	R("DATA A",22);	00027000
38	BK;	00027100
39	R("FILES ",27);	00027200
40	RUNTOTAL:=FALSE;	00027300
41	BK;	00027400
42	R("OTHER ",0);	00027500
43	SEGS:=FALSE;	00027600
44	WRITE(PRINT,B1);	00027700
45	TOTAL:=A[3];	00027800
46	P("SYSTEM",14);	00027900
47	FOR Y:=1 STEP 1 UNTIL 2 DO	00028000
48	BEGIN	00028100
49	P("DKA ",7); P("DKB ",8); P("BOTH ",17); P("PROC1 ",6);	00028200
50	P("NRM P1",-6); P("NRM P2",31);	00028300
51	P("P1&P2 ",-31);	00028400
52	P("CANDE ",38); BK; PP("NOLAP1",39,1); PP("NOLAP2",-39,1);	00028500
53	PP("CTOLAP",43,1);	00028600
54	IF Y=1 THEN	00028700
55	BEGIN	00028800
56	WRITE(PRINT,N);	00028900
57	TOTAL:=A[14];	00029000

END;
END;
IF GRAPHS% ARE DESIRED

00029100
00029200
00029300

1 THEN BEGIN
2 WRITE(PRINT[PAGE]);
3 GRAPHIT(STR,0);
4 WRITE(PRINT[PAGE]);
5 GRAPHIT(STR2,1);
6 END;

00029400
00029500
00029600
00029700
00029800
00029900

7 IF ENDTOG THEN GO TO EOF ELSE
8 BEGIN
9 ENDTIME:=A[29];
10 GO TO DOAGAIN;
11 END;

00030000
00030100
00030200
00030300
00030400

12 GO TO DOAGAIN;
13 EOF: END.
14 END;END. LAST CARD ON OCRDING TAPE

00030500
00030600
99999999

0000000000000000)x2A41e<

Data Documents/Inc.