

INTERDEPARTMENTAL

MASSACHUSETTS INSTITUTE OF TECHNOLOGY CAMBRIDGE, MASS. 02139

from the office of

October 7, 1970

MEMORANDUM

TO: Multics Administrative Distribution

FROM: J. H. Saltzer

SUBJECT: Multics Dial-up Statistics

Dial-up

Enclosed is the monthly report of Multics dial-up statistics. Since a new user control package has been installed, we are beginning to count the number of logins on each line and also the number of seconds of login time accumulated, by line. These statistics do not yet appear in this summary, but two items have been gleaned from the raw data:

1. For some reason, only about 60 percent of all calls received result in successful logins. This may reflect either a data collection error or a very frustrated user community.
2. Successful logins seem to have an average duration in the range between 45 and 60 minutes.

On September 25, those lines reached by dialing "8" were regraded and 16 more lines were introduced. Although Multics kept the additional 16 lines busied out until October 1, the regrading of the original 48 lines certainly modified the dial-up pattern for the last few days of the month.

Total September dial-up counts were down about 20 percent from July and August, apparently reflecting improved system reliability, since each system crash causes many interrupted users to dial up one extra time. (Total system usage was reported about the same in September as it was in August.)

The July and August dial-up counts suggest that the upgrade to 64 lines for 2741/1050 usage has occurred just in time. The last line in the hunt sequence apparently was in use for about 30 hours during each of those months; during those periods busy signals were probably received by many additional callers. (Several were reported.)

Use of Teletype Model 37's remains low, with four of the ten lines essentially unused. It might be appropriate to deliberately encourage some users to switch to this terminal device, to make better use of the GIOC hardware which is currently installed.

The Honeywell PBX appears to be fairly well saturated, but there may be no reason to add more lines if Honeywell has no additional terminals available to use them.

JHS/mw
xc: Mr. M. Berlan

Dataswitch Level 8: (IBM 1050/2741)

<u>Trunk</u>	4/5- 5/4	5/4- 6-1	6/1- 6/29	7/1- 8/3	8/4- 9/1	9/2- 9/30
85	160	118	159	183	262	318
86	312	293	150	304	242	50
87	47	31	81	124	141	165
88	145	105	188	203	191	163
89	209	191	244	268	231	232
90	365	303	231	237	260	356
91	202	152	135	226	256	194
92	454	294	266	272	345	340
93	162	146	210	226	253	128
94	136	75	81	119	127	125
95	8	11	35	81	98	20
96	0	0	3	24	15	10
97	185	193	203	246	322	272
98	255	282	230	317	275	276
99	77	52	38	137	139	57
100	19	27	68	195	151	76
101	11	10	23	78	94	5
102	3	0	0	19	48	5
103	2	0	1	38	59	17
104	4	0	2	104	157	5
105	5	0	12	142	105	62
106	35	13	64	114	73	146
107	47	20	59	70	157	138
108	135	116	170	138	248	309
109	264	278	298	381	317	378
110	627	491	307	521	448	568
111	45	27	96	209	247	137
112	3	0	17	112	93	21
113	51	51	120	145	184	138
114	101	118	168	227	240	199
115	291	307	280	364	322	361
116	395	344	337	407	334	263
117	540	368	308	396	366	351
118	117	107	207	249	318	171
119	38	21	50	119	198	34
120	217	199	237	318	257	213
121	264	311	271	345	315	290
122	852	591	528	617	412	591
123	9	39	36	69	114	45
124	2	0	11	41	54	26
125	135	124	150	221	162	114
126	519	382	301	347	264	301
127	459	427	380	438	345	511
128	325	241	242	251	282	212
129	74	50	134	190	168	116
130	50	49	89	121	148	73
131	17	21	65	126	138	96
132	218	160	187	271	251	207

TOTALS	8591	7138	7472	10350	10 226	8885
No. of days	31	28	28	34	28	28

Honeywell PRX (Model 37 Teletypes)

Ext.	4/5- 5/4-		6/1- 6/1-		7/1- 8/3		8/4- 9/1		9/2- 9/30	
	5/4	6/1	6/1	6/29	8/3	8/3	9/1	9/1	9/30	9/30
271	248	244	200	190	70	32				
272	182	159	129	205	247	224				
273	120	149	99	131	188	188				
274	93	110	67	87	161	139				
275	97	68	52	77	167	141				
276	63	62	24	59	141	133				
277	47	37	35	27	141	123				
278	2	53	13	22	120	64				
TOTALS	852	882	619	798	1235	1044				
No. of Days	31	28	28	34	28	28				

Other Lines

Ext.	**	**	**	**	**	**	**	**
1384	**	**	**	**	**	**	**	**
1385	25	46	40	79	66	62		
1636	161	124	171	181	125	97		
1637	159	130	160	177	124	90		
1638	147	121	188	182	134	142		
1639	*	*	*	*	*	*	*	*

* Line in use whenever system is running; dial-ups are not counted.
 ** Line 1384 is attached to GIOC channel 208, which is defective, and thus not in use.

NUMBER OF CALLS RECEIVED BY MULTICS SERVICE MACHINE

Dataswitch Level 7: (Model 37 Teletypes)

<u>Trunk</u>	4/5-	5/4-	6/1-	7/1-	8/4-	9/2-
	5/4	6/1	6/29	8/3	9/1	9/30
66	0	0	0	1	0	1
67	7	4	2	9	0	3
68	2	0	0	10	0	0
69	0	0	0	0	0	0
70	0	0	1	0	2	1
71	20	14	11	14	13	29
72	40	56	31	64	73	80
73	97	132	143	154	217	237
74	285	297	332	454	381	444
75	651	541	393	576	622	563
TOTALS	1102	1044	913	1282	1308	1358
No. of Days	31	28	28	34	28	28