

2/1/69

Desk calculator performance on CTSS

date	# of users	# of interactions	reaction time (cpu time)	swap time	c/i	s/i
2/1/69	9 users	108	21 m. 1.233	13.566	11.8 ms	130 ms.
1/26/69	14 users	113	6.1 m. 1.350	15.350	11.9 ms	147 ms.
1/11/69	19 "	14	.566	2.33	40.5 ms.	167 ms.
1/11/69	14 "	250	32 m. 3.050	37.716	12.2 ms	150 ms.
2/1/69	9 "	2	.033	dirin .416	15.5 ms	215 ms.
2/1/69	"	2	.050	direct .833		

$$\text{swap time / interaction} = 150 \text{ ms}$$

Disk swap time for first interaction = 260 ms
 650 ms

if ~~commt~~
 sticky entry is
 directory in core.
 if ~~commt~~
 sticky entry is
 directory not in core.

$$\text{execution time / interaction} = 12 \text{ ms}$$

average of 165 ms / interaction

can handle 6 interaction/sec, or 360 / minute

Core image is
$23318 = 124/\text{sec}$
inc 12 bit I/O package
BSS deck is 7278
$= 471/\text{sec}$

∴ One user can produce 6 interaction / minute, or the average,

CTSS could support 60 users such users.

CTSS cost is 165 ms / CPU time at $\sim \$240/\text{hour}$.

$$= \$4/\text{minute}$$

$$= \$6.6 \text{ \$/second}$$

$$= 14 \text{ \$/interaction}$$

$$\$4/\text{minute} \times 165 \text{ ms}$$

$$\frac{400}{60 \times 1000} = \frac{X}{160}$$

$$\frac{400 \times 160}{60 \times 1000} = 64 = 14$$

33 ms.

~~14~~
~~132~~
 13 ms.