To: Operations

From: Noel Morris

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Subject: Use of dual DSU-190 Subsystem on Multics

A temporary change has been made to Multics to allow the use of an additional DSU-190 subsystem on Multics with up to 16 additional disk drives. This will allow running up to 32 DSU-190 disk drives in Multics.

The change has been made in such a way that the second DSU-190 subsystem appears to Multics and BOS as a DSU-270 subsystem (but with the characteristics of a DSU-190 system). To utilize the second subsystem, add an appropriate D270 configuration card to the configuration deck describing the channels to be used, the areas available, etc. This card should be made up exactly as described in MOSN 4.3 for the D190 card (except, of course, that the first field will be "D270"). Modify the PART MULT card to include this area in the fifth FREC-NREC pair (as if for D270). Insert the following card in the configuration deck:

THRS 0 n

n is chosen to be equal to $R-\delta$ where R is the number of Multics records available on the first DSU-190 subsystem and δ is at least equal to 8192. When fewer than δ records are left on the first DSU-190 subsystem, the system will begin placing segments onto the second. Once a segment is assigned to a given disk subsystem, it will remain wholly on that subsystem.

Note that all disk errors on the second DSU-190 subsystem will be reported as DSU-270 errors, but DSU-190 status will be printed.

Note

BOS may not reside on the second DSU-190 subsystem. Do not attempt to load BOS with a COLD D270 card.

The system should be monitored from time to time with the dvm command to insure that the first DSU-190 subsystem is not close to overflowing. If it is, the system should be shut down and a cold boot and reload performed with a larger δ on the THRS card.