A Study of Storage Partitioning Using a Mathematical Model of Locality

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Both fixed and dynamic storage partitioning procedures are examined for use in multiprogramming systems. The storage requirement of programs is modeled as a stationary Gaussian process. Experiments justifying this model are described. By means of this model dynamic storage partitioning is shown to provide substantial increases in storage utilization and operating efficiency over fixed partitioning.

(Pages 123 through 129 omitted)