Attempt to Reuse Used-PCs as Distributed Storage

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Abstract : Storage for storing data is indispensable. If a storage capacity becomes insufficient, we can increase its capacity by adding new disks. It is, however, difficult to add a new disk when a budget is not enough. On the other hand, there are many unused idle resources such as used personal computers despite those use value. In order to solve those problems, used personal computers can be reused as storage. In this paper, we attempt to reuse used-PCs as a distributed storage. First, we list up the characteristics of used-PCs and design a storage system that utilizes its characteristics. Next, we experimentally implement an auto-construction system that automatically constructs a distributed storage environment in used-PCs.

Keywords : distributed storage, used personal computer, idle resource, auto construction

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