

Advanced Object Database Design Techniques

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ABSTRACT. Class fragmentation is an important task in the design of Distributed Object Oriented Databases (DOOD). However, fragmentation in DOOD is still at its beginnings and mostly adapted from the relational approaches. In this paper we propose an alternative approach for horizontal fragmentation of DOOD. Our method uses two different AI clustering techniques for partitioning class instances into fragments: the *agglomerative hierarchical* method and the *k-means centroid based* method. Class objects are modelled in a vector space; similarity between objects is computed using different measures. Finally, we provide quality and performance evaluations using a partition evaluator function .

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