Application to Generate Flexible Business Process Model in Enterprise Resource Planning Systems

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ABSTRACT

Business process management technology at present has been developed and applied both in small and large scale. For instance, many companies and organizations use Enterprise Resource Planning (ERP) or other business process-oriented system. Business processes will continue to change over time influenced by vary things. So a flexible business processes is needed. In this final project, we proposed a clustering method in business process model based on its similarity until produce flexible business process. The purpose of clustering is to group some similar business processes to form a common business process. A new business process can be composed based on similar common business process to increase reusability and flexibility. The clustering method implemented based on similarity value among business processes. Similarity value obtained by calculating structural and behavioral similarity. Meanwhile, the clustering process uses a graph partition approach. The results of clustering will be making common business process in each cluster by implementing union operation in each activity. The overall results of the tests showed that the common business process from each cluster already represents a flexible business process model in its cluster.

Keywords: Business Process Management, Similarity, Clustering, Common Fragment.