

## **An Improved VM Allocation Algorithm by Utilizing Combined Resource Allocation Mechanism and Released Resources in Cloud Environment**

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**Abstract :** Utilization of resources is always a great challenge for any allocation problem, particularly when resource availability is dynamic in nature. In this work VM allocation mechanism has been augmented by providing resources in a combined manner. This approach has some inherent advantages in terms of reduction of wait state for the pending jobs of some users and better utilization of unused resources from the service providers' point of view. Moreover the algorithm takes care of released resources from the finished jobs as soon as those become available. The proposed algorithm has been explained by suitable example to make the work complete.

**Keywords :** Bid ratio, cloud service, virtualization, VM allocation problem

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