

Server Clustering

Anirudh Gajanan Asare¹, Prof. S. V. Athawale², Prof. S. V. Raut³

¹Student, Dr. Rajendra Gode Institute of Technology and Research, Amravati, MH

^{2,3}Guide, Dr. Rajendra Gode Institute of Technology and Research, Amravati, MH

Abstract: *Server clustering is a technique used to connect multiple servers to function as a single system, providing higher availability, scalability, and performance. This paper explores the architecture, working principles, and benefits of clustering in enterprise environments. Various clustering models—such as Load Balancing Clusters, High Availability Clusters, and Computational Clusters—are analyzed. The paper also discusses real-world implementations, fault tolerance mechanisms, and the role of clustering in modern cloud and distributed systems.*

Keywords: Server Clustering, High Availability, Load Balancing, Fault Tolerance, Distributed Systems

