CASCADING FAILOVER OF A DATA MANAGEMENT APPLICATION FOR SHARED DISK FILE SYSTEMS IN LOOSELY COUPLED NODE CLUSTERS

Abstract

Disclosed is a mechanism for handling failover of a data management application for a shared disk file system in a distributed computing environment having a cluster of loosely coupled nodes (300,310, 320, 350) which provide services. According to the mechanism, certain nodes of the cluster are defined as failover candidate nodes (310, 320). Configuration information for all the failover candidate nodes (310, 320) is stored preferably in a central storage. Message information including but not limited to failure information of at least one failover candidate node (310, 320) is distributed amongst the failover candidate nodes (310, 320). By analyzing the distributed message information and the stored configuration information it is determined whether to take over the service of a failure node (300) by a failover candidate node (310, 320) or not. After a take-over of a service by a failover candidate node (310, 320) the configuration information is updated in the central storage.

Fig. 3