

The Session Based Fault Tolerance Algorithm Of Platform EGO Web Service Gateway

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Platform EGO is a SOA based grid platform newly released by Platform Computing Inc. to manage the shared resources across geographically dispersed sites for diverse enterprise applications, services and workloads. Platform EGO web service gateway, called WSG in the paper, is a grid middle ware to enable the applications (Web Service Clients - WSCs) to access Platform EGO services via web services with high performance, security, operability, and reliability. In the paper, a session-based a-synchronized recovery algorithm is designed to make WSG be able to recover from crashes with little effect on the WSCs. Moreover, multiple WSGs are able to process the WSCs' requests concurrently as a cluster with dynamic load balancing to provide higher performance. During the recovery, the system can either restart a new WSG, or immigrate the faulted WSG's workloads to another available WSG according to the current loads of the EGO cluster.