

ABSTRACT

Systems and methods for managing a highly available distributed hybrid database comprising: a memory storing instructions; and one or more processors configured to execute the instructions to: receive a query from a user device to retrieve data from a distributed database comprising a source node, a first plurality of replica nodes, and a second plurality of replica nodes, wherein the source node and the first plurality of replica nodes form a transactional cluster, and wherein the second plurality of replica nodes forms an analytical cluster; determine whether to process the query using the transactional cluster or the analytical cluster based on one or more rules; translate the query into a first protocol that the determined cluster comprehends; select a replica node corresponding to the determined cluster; process the query using the selected replica node; and send data associated with results from processing the query to the user device.