DATABASE FRAGMENT CLONING AND MANAGEMENT

ABSTRACT

Mechanisms and techniques for database fragment cloning and management are provided. A database object, such as a table, rowset or index, is divided into fragments. Each fragment is cloned to create cloned fragments, which operationally are substantially identical to one another. One or more of the cloned fragments may be designated as a primary cloned fragment for performing database operations or as a secondary cloned fragment for serving as backup. Updates to each fragment are implemented on the primary cloned fragment and are then propagated from the primary cloned fragment to the corresponding secondary cloned fragments. A cloned fragment can go offline, becoming unavailable to be updated. When the cloned fragment returns online, the cloned fragment is refreshed with data included in the primary cloned fragment. While being refreshed, the cloned fragment may continue to be updated. The cloned fragment is eligible to be designated as a primary cloned fragment when the refreshing process has been completed.

Fig. 4