

METHOD AND APPARATUS FOR PERFORMING DATA FRAGMENTATION ON KNOWLEDGE GRAPH

ABSTRACT

Embodiments of this specification provide methods and apparatuses for performing data
5 fragmentation on a knowledge graph. The method is used to split a knowledge graph into a plurality
of pieces of data respectively included in a plurality of devices. First, initial splitting is performed on
a plurality of edges in the knowledge graph, so that each device obtains a part of edges. Any first
device selects a diffusion node from end nodes of a first part of edges owned by the first device based
on a first diffusion velocity; obtains, as a to-be-fragmented edge, an edge that is in the knowledge
10 graph and that uses the diffusion node as an end node on one side; and adds a target edge in the to-
be-fragmented edge to first fragmented data of the first device. Then, the first device obtains a
fragmented node in fragmented data of another device; adjusts the first diffusion velocity based on
comparison between a fragmented node of the first device and the fragmented node of the other device;
and continues to select a diffusion node based on an adjusted first diffusion velocity, and cyclically
15 performs the step of obtaining an edge that is in the knowledge graph and that uses the diffusion node
as an end node on one side.

[Fig. 2]