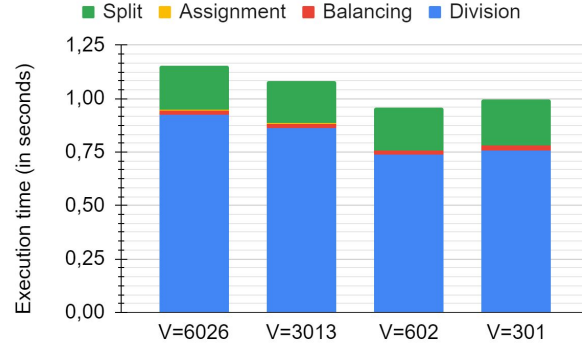


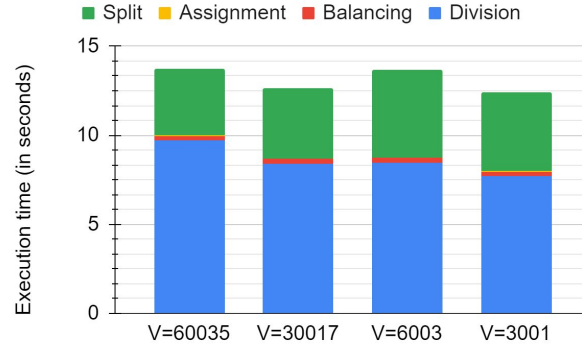
Evaluation Update volume ISWC 2022

May 2022

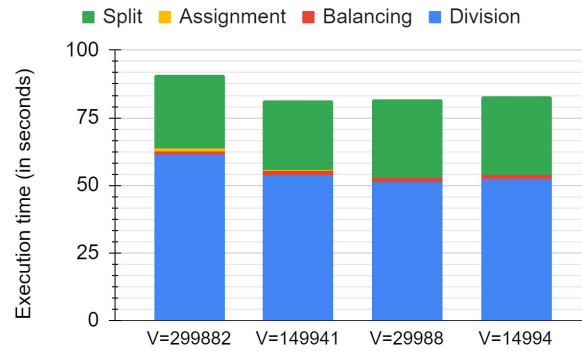
This volume is computed as the division between the original pool size and the update rate. Thus, a smaller R will yield a smaller number of updates which will involve many tuples, whereas a larger R will yield frequent updates involving fewer tuples. To produce a new publication, $\frac{|pool|}{R}$ randomly selected entities from the dataset (as well as their attributes) are deleted and the same amount from the pool is added. Regardless of R , in the end, all the tuples inside the pool will be inserted into the dataset.



(a) LUBM 100

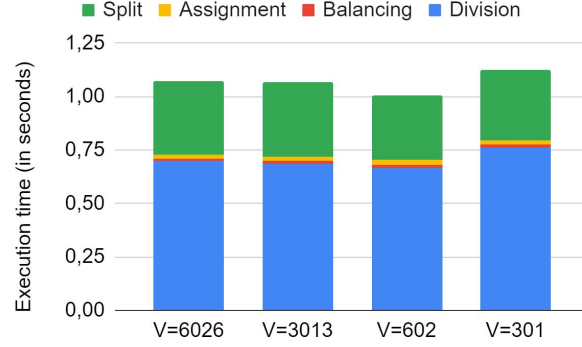


(b) LUBM 1000

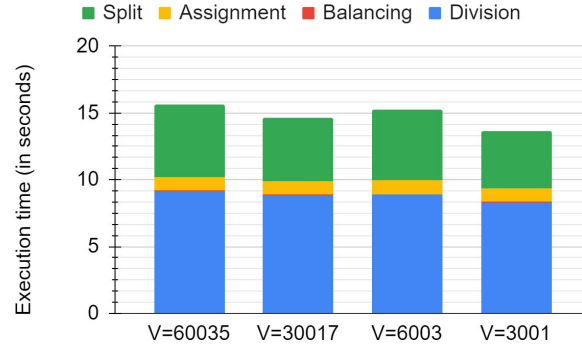


(c) LUBM 5000

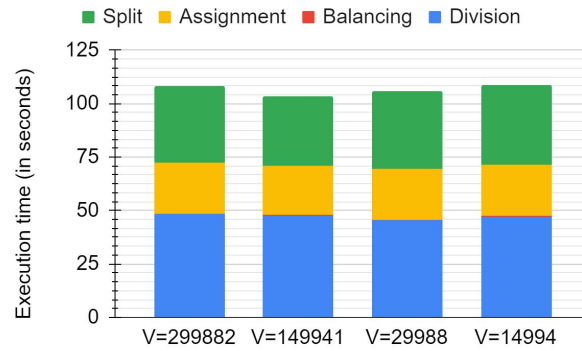
Figure 1: Execution time: varying update volumes (V value) - $m = 4$ - Three releases



(a) LUBM 100

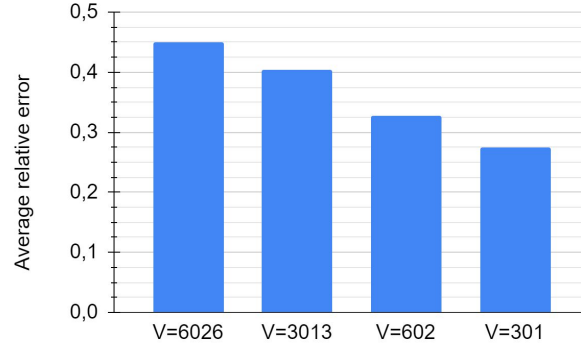


(b) LUBM 1000

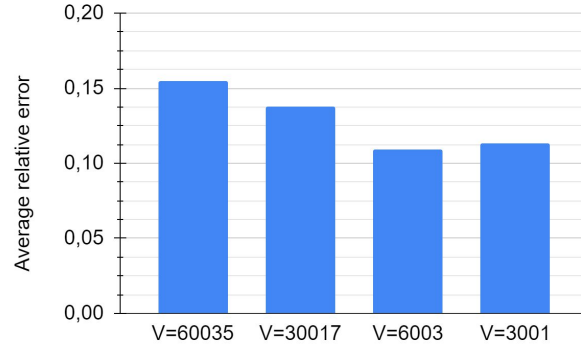


(c) LUBM 5000

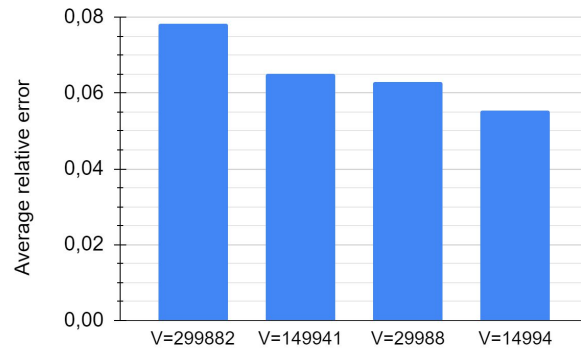
Figure 2: Execution time on the initial release: varying update volumes (V value) - $m = 4$ - Three releases



(a) LUBM 100



(b) LUBM 1000



(c) LUBM 5000

Figure 3: Data utility: varying update volumes (V value) - $m = 4$ - Three releases