CS 839: Topics in Database Management Systems
Lecture 9: Transaction Processing-3

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10/4/2023
Mon 10/9. Project meetings (No lecture)
  – Meeting (optional) with the instructor to discuss the course project
  – More slots are added
  – Location: CS4361. Signup sheet

Wed 10/11. No Lecture
  – Attend Wisconsin DB Affiliates Workshop
  – 10/12 Thu (optional) @Union South Northwoods (3rd floor). Whole-day workshop
  – 10/13 Fri 9:00-10:30 (required) @CS 1240. Sponsor talks from Microsoft, Google, and Snowflake.
  – Attend and submit a review for the talks by Sunday 11:59pm
Transaction Processing-3 – Q/A

Why CRDB not using storage disaggregation?  

No support for snapshot isolation?
Discussion Questions

The architecture of Cornus provides one answer to the question we discussed in last lecture—it supports multiple writers in a disaggregation architecture, by sharding data across compute nodes. Do you see any limitation of this architecture? Can you think of any optimization to mitigate such limitations?

Is the distributed commit protocol in CRDB a variant of 2PC? Or is it a different protocol based on a different set of assumptions? Are the two optimizations, i.e., write pipelining and parallel commits, applicable to 2PC as well (e.g., Cornus)?