**ECE356: Database Systems** 

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## Lecture 29 — More Recovery; ARIES

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## More on Recovery

The algorithm and the approach we have examined for recovery works and it produces the correct results, but it comes with some drawbacks and performance decreasing elements.

## **ARIES**

In spite of sounding like the name of a NASA program to Mars or some such, the ARIES algorithm is a database recovery routine used by IBM. It relies on three main pillars: write-ahead logging, repeating history during redo, and logging changes when undoing something [EN11].

## References

[EN11] Ramez Elmasri and Shamkant B. Navathe. *Fundamentals of Database Systems, 6th Edition*. Addison-Wesley, 2011.