

TX Manager Recovery - after platform crash

1. *Locate Each Journal*

2. *For Each Journal*

3. Open and reposition
4. Rebuild XID hash by reading the journal forward
- 5. Start from journal cleanpoint**
- 6. Add Each XID to hash without [hard] resource associations**
- 7. Add appropriate number of null entries in hash table entry for each XAResource which must be negotiated**
- 8. Delete XIDs for which “done” records were recorded**
- 9. Hash key without bqual field**

10. *Report*

11. XIDs to be recovered
12. Send to a log file for later perusal / debug

13. *For Each XAResource [The BIG Unknown]*

14. In final design, this warrants a separate thread for each XAResource
15. Call Recovery
16. Lookup Each XID by format / gtrid (w/o bqual)
17. Add Resource association for each match (w/ bqual supplied by resource)

18. *For Each XID*

19. Call COMMIT / ROLLBACK on each XAResource
20. Mark XAResource entry of Xid in hash table to indicate that recovery complete

21. Record XID disposition in memory table for later report including heuristic decisions

22. If this is the last XAResource for the Xid then record DONE mark on journal and delete entry from hash table

23. Report - (This may need to be an administrative report for later)

24. Actions taken on each original XID; e.g., COMMIT / ROLLBACK

25. Unresolved XID's (for whom no XAResource vouched)

26. Note XID's marked "external" on journal

27. Each known XAResource which did not respond